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No. 5

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The painter wins his bet!

It happened at Wyndecrest, the charming Dickerson farm residence, outside of Dayton, Ohio. The letter from Mrs. Dickerson reads:

"Each spring it has been necessary to have the French doors and the ceilings of the porch varnished because of their weather-beaten appearance. Last summer we had an old reliable painter do the work and he made a bet with us that he would put a varnish stain on those doors that would remain just as bright and unclouded the year after, as it did when first put on.

"He then put Valspar Varnish-Stain on the doors; and Valspar Varnish on the ceiling. Still I was skeptical.

"The winter has been most severe. Rain and snow have beaten around our house, but the doors and ceiling remain beautifully bright and unchanged by the weather. No

wonder Mr. Painter's eyes twinkled when he made so generous a guarantee, for he bet on a sure thing."

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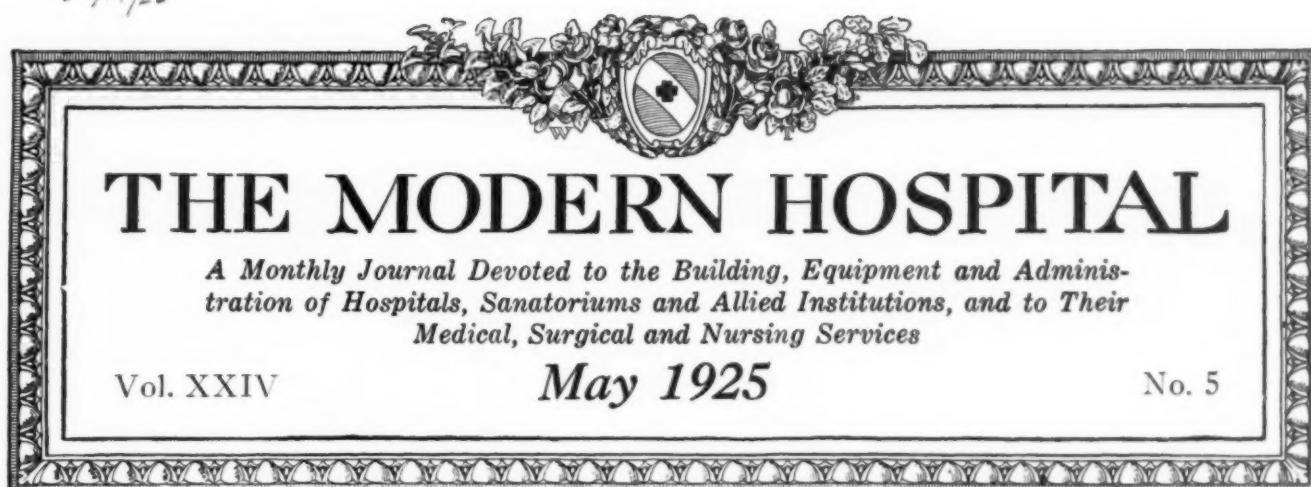
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Valspar-Stain ☐
Choose 1 Color.....
Clear Valspar ☐
Valspar-Enamel ☐
Choose 1 Color.....
Valspar Book ☐

MOD. HOSP. 5-25

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6-7-1926



THE ROLE OF THE SMALL SANATORIUM IN THE FIGHT AGAINST TUBERCULOSIS

BY W. C. REINEKING, M.D., SUPERINTENDENT AND MEDICAL DIRECTOR, ROCKFORD MUNICIPAL SANATORIUM, ROCKFORD, ILL.

THE campaign against tuberculosis as carried on by many of the more progressive and populous counties of Illinois, outside of Chicago, centers around the small city or county sanatoriums. At the present time these range in capacity from thirty to seventy beds.

There are fifteen such sanatoriums in the state of Illinois, and several more are in process of construction or preliminary organization. One of these is operated jointly by the city and county, two are municipal institutions and the others are maintained by the counties in which they are located. In most instances, the county tuberculosis association is also an influential factor in the development of the sanatorium and its work.

Four Phases of Movement

Under the plans followed in most of the counties the sanatorium is not necessarily the only, or even the most important, factor. Four distinct phases of the anti-tuberculosis movement are generally planned for and usually attained; namely, a field service for combing the community in search of the early suspects or unknown cases, and for following up the discharged cases; a tuberculosis dispensary for the diagnosis of these suspects brought in by the field nurse; the sanatorium, for the care, cure, instruction and reformation of habits of the diagnosed case; and the preventorium, for the pre-tuberculous, under-nourished, poorly developed child.

In many of the Illinois counties this whole campaign is directed by a full-time resident physician, who also provides the medical care for the patients in the sanatorium. The field work is car-

ried on by one or more county tuberculosis nurses, assisted in many instances by the school nurses and the visiting nurse corps of the larger cities in the county. The dispensary is conducted by the medical director with the aid of all of the nurses employed in tuberculosis work. The preventorium are operated either directly or by the sanatorium boards or by voluntary agencies, such as the local tuberculosis societies or the Red Cross. Some are open throughout the year and some are merely summer camps.

All of these agencies naturally center around the sanatorium and are directed by sanatorium authorities. Each is essential in itself and all are considered of equal importance and dependent upon each other for efficiency. The Illinois tuberculosis law makes a broad provision for an extensive scope of work which enables the sanatorium boards to conduct and finance and to co-ordinate these several activities. The Rockford Municipal Sanatorium (also a county institution) is typical of the Illinois group and as it was the first organized, and is now the largest, its buildings, equipment and personnel are here described.

Organization of Sanatorium

The sanatorium proper, with a capacity of seventy beds, consists of five buildings situated on a beautiful wooded hill northeast of Rockford, just outside of the city limits. The original building is now used solely for administrative purposes and for housing nurses and help. The hospital section consists of six one-story wings, built to the south of the main building and connected with it by corridors. A separate building houses twelve

male convalescent patients. The superintendent's residence occupies a beautiful spot on the grounds. A separate service building contains boiler rooms, incinerator-water heater, complete laundry, garage and engineer's room. A fifth building contains a well and pumping machinery.

A mechanical refrigerating plant cooling two good sized cold storage rooms and manufacturing one hundred pounds of ice a day, a gas plant, a water softener, capable of softening twenty thousand gallons of water a day, and a dish washing machine are mechanical improvements installed in recent years. An occupational therapy department was organized two years ago and is in charge of a full-time instructor. A school is maintained for children and for adults who wish to improve their education while at the sanatorium.

Medical equipment consists of a complete x-ray outfit, apparatus for induced pneumothorax, sufficient surgical equipment for sanatorium purposes, a dental chair and accessories, and a complete laboratory. Therapeutic lamps are in use and a complete outfit for light treatment is ready to be installed.

Recreational facilities consist of a library, motion picture machine, radio, piano, victrola, playground apparatus and croquet sets. Two groves on the premises, augmented by lawn seats, awnings, swings, and summer houses, afford pleasant outside surroundings. A voluntary organization

of patients, the "Cheer'um Club," provides entertainment and publishes a monthly magazine, devoted to sanatorium interests.

The sanatorium staff consists of the following: Superintendent, or medical director, part-time public accountant, head nurse and six assistant nurses, teacher, laundress, cook and assistant cook, five maids, and three persons engaged in cleaning. An engineer with two assistants, and a patient employed as chauffeur and handy-man, complete the working personnel.

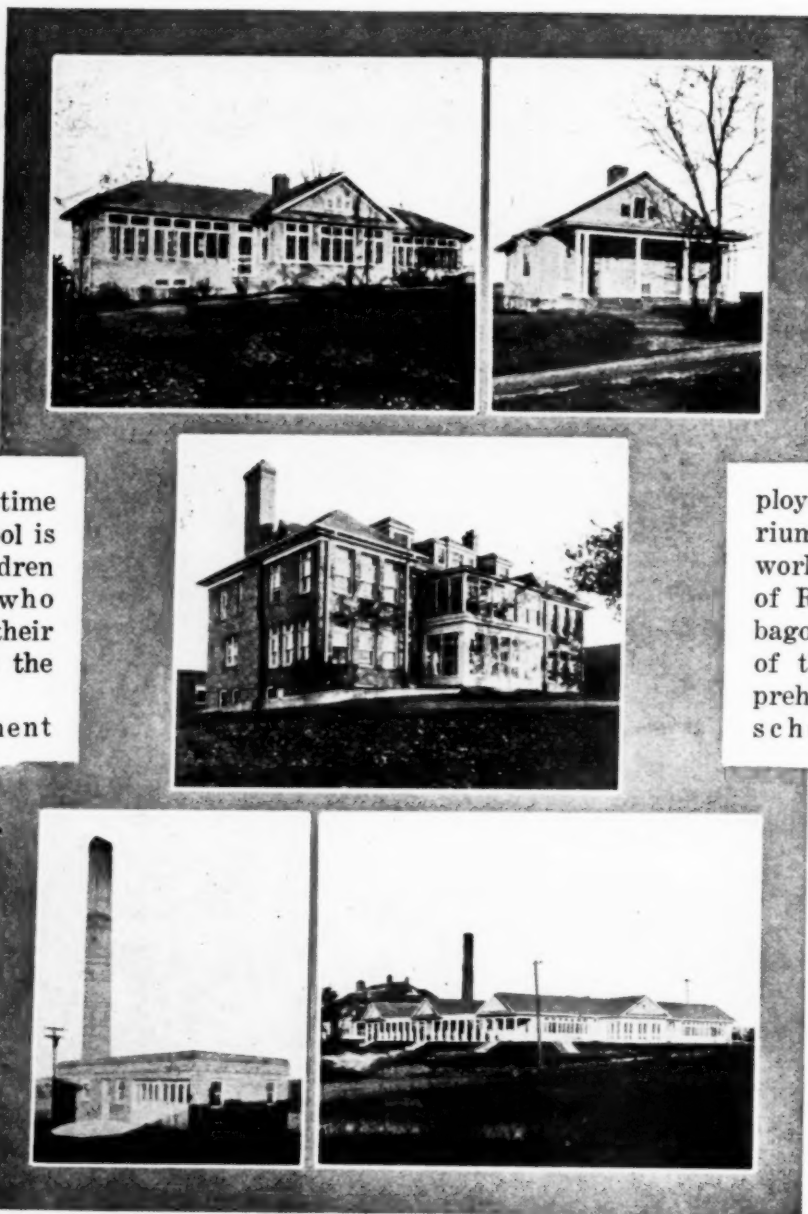
The out-patient, or social service, department has an office in the county courthouse. Three experienced field nurses, trained in tuberculosis work, are employed by the sanatorium board to do rural work outside of the city of Rockford in Winnebago County. The scope of their work is comprehensive and includes school examinations,

educational work, such as the Crusader campaign, and home calls on the sick, as well as general tuberculosis field work. A year ago the sanatorium board eliminated overlapping in nursing service by employing the nurses of the Rockford Visiting Nurses' Association to do the out-patient

tuberculosis work within the city of Rockford. These nurses have received special instruction in tuberculosis and social work, both in the form of lectures and in a few weeks of service at the sanatorium. The result of this plan has been most

(Continued on page 414)

VIEWS OF ROCKFORD MUNICIPAL SANATORIUM



(Upper left) separate building which houses twelve male patients; (upper right) superintendent's residence; (center) administrative building; (lower left) service building; (lower right) view of the six one-story wings.

BUDGETARY CONTROL OF HOSPITAL FINANCES*

BY R. N. BROUGH, COMPTROLLER, NEW YORK POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL, NEW YORK, N. Y.

A DECADE ago a budget was uncommonly used except by municipalities and governments for the purpose of placing a check on expenditures. In the public mind it was apt to be associated with red tape and inefficiency. Today it is admittedly a business necessity and as such has been made a part of our economic structure.

In America such development is not unusual. Our record of accomplishment is due in part to our readiness to seize that which is new or different as soon as its usefulness has been demonstrated. In medicine, in mechanics, in art, in every sphere of endeavor, the practices of yesterday have been discarded for the better performances of a new day. We do not have to look far when we seek the fundamental factors which produced and are still producing the latest advances in the realm of financial management. The two outstanding reasons may be briefly stated as, first, the increasing size and complexity of affairs and, second, the realization that statistics and reports are apt to reveal their truths too late to be of utmost value.

This last point was forcibly expressed by one of our most progressive hospital executives at a conference held to consider ways and means of improving the financial condition of a growing institution. One of the members of the group was arguing strongly for better and more comprehensive monthly reports so that the entire situation might be thoroughly analyzed, when the official mentioned exclaimed, "So far, so good. But what we want is not an accessory after the fact, but a danger signal to tell us at once when things are going wrong. What good does it do to know fifteen or twenty days after the close of the month that there has been a deficit or a profit? What we need is not statistics that are dead before they are born, but advance information of where we are going, so that if necessary we may change our course and at the end of any given period—month, quarter or year—land at the right port. You talk about reports. We've been working under them for years. Look at the results." (He pointed to a graph on the wall, showing the revenue and expenses for each month during a period of over a year.) "Do you think we are getting anywhere when our record looks like a fever chart?"

The graph shown in figure 1 tells a story

typical of many hospitals today. It indicates uncertain monthly results and fluctuations that must have been annoying and unsatisfactory, if not dangerous.

"More than that," continued the executive, "I'm sick of deficits and explanations! Apparently,

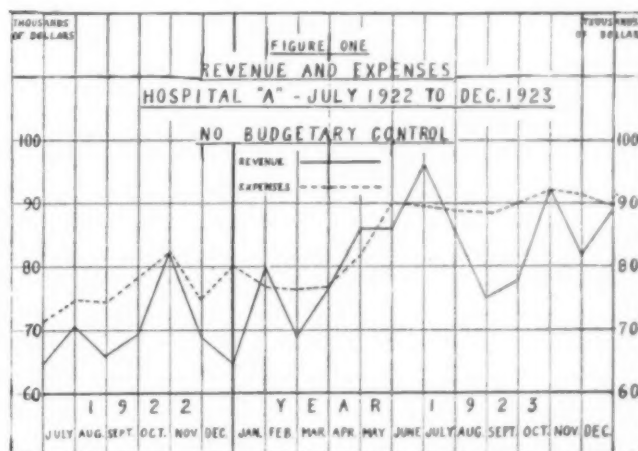


Figure 1.

good reasons can always be found for a deficit. But we ought not to function on that basis. There must be a better way."

This somewhat explosive statement changed the trend of the discussion and led to a consideration of what other guidance of the finances could be found than that indicated by the accounts and the monthly reports. One member of the committee, who previously had taken but little part in the conversation crystallized the subject matter when he said, "Gentlemen, what we need is a budget. That is the most efficient means of restricting expenditures to income. It would serve as a chart for the future. It would practically give us accounts in advance."

Budgets and the Universal Law of Control

As a matter of fact, the adoption of budgets by corporations and institutions is an extension or practical application of the universal law of control. In our personal expenditures most of us are under budgetary control "by reason of the law of what we haven't got," as the Irishman said. Every business in the final outcome "cuts its garment according to its cloth." What many have been wanting is a refinement or a better application of this primal truth. A large number of executives realize the force of what Mr. G. W. Curtis¹ has said:

*This is the first of two articles on budgetary control, prepared for THE MODERN HOSPITAL by Mr. Brough. The second article will appear in the June issue.

1. THE MODERN HOSPITAL, April, 1924, p. 331.

"Modern hospital development calls for some central and firm control of the institution. The public more and more demands that hospital executives be versed in modern business methods and be able to put them in practice."

The modern business method is budgetary control, in one form or another. An outline of how the principle may be applied to hospitals is given here, along with some indication of the advantages to be derived.

Budget a Success in Industry

Let us turn for a moment to the industrial field, where during recent years, there has been an interesting and instructive development in the "controlled cost" method of production. Before an article is to be produced upon a commercial scale, a careful estimate is made of the time required for each operation as well as the prices to be paid for each kind of material to be used in the completed unit. In this way a detailed estimate is made of the cost per piece, in keeping with the processes of manufacture. These figures are multiplied by the quantity to be produced and are placed upon the cost sheet in a column parallel to that in which the actual figures are to be summarized, so that as the work progresses comparisons may be made with the estimated cost. Any marked fluctuations are quickly detected and investigated. In this way it is possible for an alert factory manager to prevent "leaks" or unexpected high costs which, under former methods, would not have been revealed until some time after the entire quantity had been completed and possibly marketed, thereby resulting in losses or unsatisfactory profits.

Results Exact in Spite of Complications

When it was demonstrated that costs could be controlled in this manner, it was but a step to demand that the financial results should be likewise kept in the straight and narrow path. In that very difficult field, where the problem is complicated by a host of factors, such as fluctuating demand, unexpected changes in basic economic conditions, seasonal sales variations, sudden labor troubles, uncertain collections, and shifts in the public tastes, results have been worked out in some instances with almost scientific exactness.

If such a result can be attained in what would appear to be a veritable maze, surely any progressive hospital can do as well. But many executives will not agree with this statement, and claim that in their particular case estimates of the future cannot be made, or that the labor and cost involved would not be justified by the results to be obtained. Such a conclusion is usually erroneous. In practically all instances it is based

upon a misconception of the amount of work involved or of the fundamental conditions. With the idea of making sure that the entire subject is being correctly judged, let us review the steps involved in successful budgetary control and also briefly consider the results obtained during the year 1924 by a New York hospital.

Fundamentals of a Budget

It is a striking fact that the fundamentals of budgetary operation not only come within the bounds of modern business methods but obviously should be followed by all institutions trying to prove worthy of their trust. These fundamentals are as follows:

1. A study of existing records for at least a year's operation.
2. Formation of plans for the succeeding period based both on past performance and contemplated changes.
3. Reasonably accurate accounts, including storeroom and stock records.
4. Departmental support and cooperation.
5. The preparation of periodic reports showing in comparative form both the actual and estimated figures.

Irrespective of budgetary control, the value of these aids to successful management would appear to be obvious. The adoption of the budget system will unify them into a vital system and will automatically stabilize the entire financial structure.

First Steps in Budgetary Adoption

Assuming that a hospital desires to prove the correctness of the foregoing statement without incurring unnecessary expense, what are the minimum steps to be undertaken? Because of varying conditions, an answer applicable to all cases is difficult but the following suggestions may be of value:

1. Start with a relatively simple budget classified to conform with the accounts in the existing ledger or with as few variations therefrom as a review of the records shows to be imperative.
2. Hold a preliminary conference or meeting of department heads with the idea of enlisting their support in the budget plan.

At such a gathering a decision should be made to adopt a budget at the beginning of the next quarter or half year. This meeting should be held a sufficient time in advance to permit study before the budget's adoption. An understanding should also be reached that each department is to submit promptly a tentative monthly budget for the period in question. Many will be unable to do this because of a lack of knowledge of costs or finances in relation to their own sphere. The directors or executives in charge of such departments should be asked to confer with the accountant or bookkeeper, so as to secure the necessary data or assistance. In this manner a fair estimate of expenses can undoubtedly be prepared.

Care should be taken, especially in the begin-

ning, to avoid numerous sub-divisions or classifications. This is the rock upon which far too many accounting and cost systems have crashed. A plethora of figures is almost as bad as none at all. Without endeavoring to be critical, an instance might be cited of a "composite budget" for schools of nursing, recommended in 1924, containing at least twenty-eight items. Such detailed accounts, however valuable in the abstract, are impracticable, and if put into effect would be prohibitive in cost. From a practical standpoint eight accounts would be sufficient, and certainly the average hospital accounting department could not find the time to handle more than that number.

After departmental expenses have been estimated in this manner, the figures will be reviewed by the superintendent to make sure that they include contemplated changes or enlargements in existing facilities for the period covered. After the expenses have been approved or revised the next step is to summarize and make a comparison with the estimated revenue.

Figures Based on Income Misleading

In preparing the latter figures it is well not to be led astray by optimism, as figures of income based upon bed capacity or other theoretical standards are apt to be misleading. A conservative estimate should be made, in substantial agreement with the results of the preceding equivalent length of time, after proper allowances for changes and additions. Such summaries of estimated expenses and revenue should finally be translated into average monthly figures so that comparisons may be readily made between the budget estimates and the actual results as shown by the monthly reports. They will then present "a picture of the financial condition" in terms readily understandable by anyone interested in the business management. It is unfortunately true that many executives or trustees do not grasp the full meaning of the balance sheet and profit and loss figures as currently reported. The presentation of a clear, concise, and straightforward budget for, say, a six months' period, will sometimes awaken more interest in the financial situation than will a number of routine reports currently prepared for officials and board meetings.

Sample Summaries for Comparison

Copies of a typical budget summary as well as the figures for an important department appear in Tables I and II to illustrate the foregoing explanation and to demonstrate the simple manner in which a satisfactory budget may be prepared when such a plan has not previously been followed.

TABLE I—ESTIMATED BUDGET FOR SIX MONTHS ENDING JUNE 30, 1924.

SUMMARY	
Departments	Amounts
Administrative	\$ 5,500.00
Professional care of patients	4,850.00
Department of nursing	7,100.00
Out-Patient department	4,650.00
Department of medical social service	1,250.00
Pharmacy	2,750.00
Department of pathology and bacteriology	2,900.00
Biochemical laboratory	2,650.00
X-ray department	2,675.00
Dietary department	22,400.00
Department of purchase and supply	865.00
Housekeeping department	2,450.00
Property maintenance department	5,015.00
Engineer's department	7,345.00
Laundry	2,200.00
Linen	350.00
Total	\$74,950.00
Add, contingencies and unforeseen expenses	1,050.00
Grand total	*\$76,000.00
ESTIMATED REVENUE	
Hospital revenue, on basis of present charges	\$67,500.00
Estimated additional revenue, if recommendations for revision of room rates and operating room charges be approved	2,500.00
Add, other income	7,000.00
Donations	1,000.00
Total	\$78,000.00

TABLE II—ESTIMATED BUDGET FOR SIX MONTHS ENDING JUNE 30, 1924.

DIETARY DEPARTMENT	
Food	Average Monthly Expenditures
Meat and fish	\$ 7,500.00
Milk and cream	2,000.00
Butter and eggs	2,900.00
Groceries and bread	3,500.00
Fruits and vegetables	2,800.00
Total	\$18,700.00
Salaries and wages	\$ 3,200.00
Gas and electricity	160.00
Kitchen equipment	100.00
China and dining room equipment	90.00
Tray covers, paper napkins, etc.	150.00
Grand total	\$22,400.00

Frequently when the procedure as above outlined has been carried into effect it will be found that the contemplated expenses are in excess of the estimated revenue. As no institutions should, with equanimity, face a deficit, one of two steps should be taken—either the expenses should be reduced or the revenue increased. In presenting to the finance committee a budget for the first six months of 1924, the superintendent of one of the leading New York hospitals explained that apparently no reduction in expenses could safely be made if the standards of service were to be maintained; therefore, he recommended slight increases in charges to patients for the use of the operating room and other special services, as indicated above. After full consideration the decision was reached that good business practice dictated the adoption of the recommendations which were forthwith put into effect. The result at the end of the period justified the decision.

The concluding article will outline several features to be stressed in working the budget.

*This total may be divided by departments, if desired.

THE PHYSIOTHERAPY DEPARTMENT OF BEEKMAN STREET HOSPITAL, NEW YORK, N. Y.

BY NORMAN E. TITUS, DIRECTOR OF PHYSIOTHERAPY, BEEKMAN STREET HOSPITAL, NEW YORK, N. Y.

AFTER the reorganization of Beekman Street Hospital, situated in the heart of the business and industrial districts centering around Wall Street in lower Manhattan, serious consideration was given by the staff to the use of physiotherapy to supplement other forms of treatment. A department was planned and the writer was appointed to organize and take charge of it.

The hospital which has a capacity of fifty-two

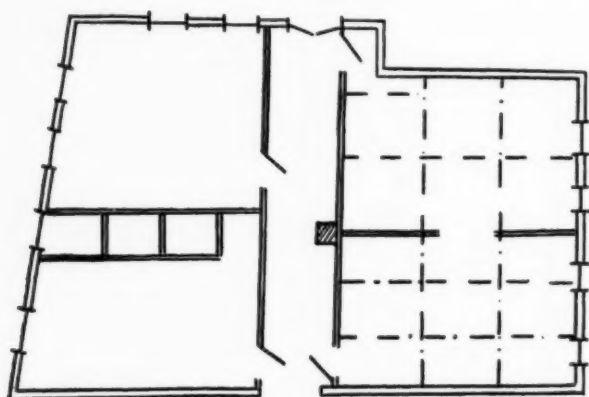


Figure 1. Sketch of floor plan of the original room.

beds, is being expanded to one hundred beds. The portion of the building allotted to the department of physiotherapy consists of a room about thirty by forty feet. Through the center of this room is a passageway leading to a fire exit, and the space on each side of the passageway is divided in half by partitions. It was considered best to leave the partitions standing to reduce as much as possible the initial cost of equipping the department. A rough plan of the floor space of the department is shown in figure 1. When the expansion of the hospital is completed, about May first, the space allotted will be forty square feet unbroken by corridors.

By means of wires stretched seven feet above the floor, the rooms to the north were divided into a total of ten areas, nine of which are in use. These areas are further divided off by curtains hooked to these wires. This system of forming cubicles is the least expensive and gives the greatest flexibility in the use of space. The arrangement has also proven particularly convenient because the crib sheets are easily cleaned in the hospital laundry. They may be changed frequently and can be taken down or pushed back to make the room into one large area for demonstrations

and lectures, or to accommodate the different treatments given. Many hospitals consider the erecting of permanent wooden partitions a better arrangement, but it has been the writer's experience that sheets strung on wire are much cleaner, and do not require the labor that is necessary to keep wooden partitions dusted and clean.

The south room with the three booths and the passageway, shown in figure 1, is used for the office and record room which occupy one part of the room while the static machine occupies the other. It would, of course, be more ideal to have the static machine in a room by itself, so that its sound would not be heard all over the hospital. The two central booths have current outlets installed in them and the patients are treated with light in these booths before going to the static machine for treatment. By having two booths, one patient can always have light while the other patient is being treated. The third booth is used to give ultra-violet ray treatments.

Treatments are generally administered on plinths or massage tables, of heavy construction, measuring eighty-four by thirty inches. The tops are covered with padding and a waterproof

Physiotherapy Recommended:	
R/.....	Date.....
Treatments for.....	
..... (Days) (Weeks)	
..... M.D.	
Department of Physiotherapy	
Report	Date.....
.....	
..... M.D.	

Figure 2. Copy of rubber stamp used in referring a case for physiotherapy.

Date.....
Report of Progress Requested:
.....
..... M.D.
Department of Physiotherapy
Report
.....
..... M.D.

Figure 3. Stamp used when a report is desired.

material, and one end is raised for a headpiece. The tables have a shelf one foot from the floor on which the patient may put his clothing and on which towels and supplies may be temporarily stored. The top of the table is thirty inches from

FORM 70 PHYSIOTHERAPY DEPT.

Name	JONES, Albert	Dept. No.	414
Address	704 East 50 Street	Hosp. No.	39462
Business	Driver	O. P. D. No.	28041
Business Address	142 West 40 St.	M. Age	37
		M.	
Ref. Diagnosis	Dislocation & lacerations, Rt Elbow 1/10/35		
Ref. by	Employer - John Burns		
Admitted	FEB 1 - 1925		
Discharged	FEB 18 1925		
Result	Max. Imp.		
Compensation Case?	Yes		

Figure 7. History card for department file.

and exercise are never given without a preliminary warming up of the part and this form of heat is most necessary in preceding treatments with static, galvanic, faradic and sinusoidal currents. Applicators for radiant light and heat should be such that the reflected beam does not focus, and small hand applicators with light stands are a very useful form of apparatus. It is convenient to have larger reflectors also with carbon filament bulbs, such as the small applicators have, and a department should have at least one so-called deep-therapy lamp. The difference in heat given by carbon filament bulbs and mazda filament bulbs necessitates that both sources of radiant energy be available.

The equipment described in use at the Beekman Street Hospital can be purchased for less than five thousand dollars. It will be noted that there is no hydrotherapy nor a definite department of mechanotherapy. With the class of acute cases treated at Beekman Street Hospital, it was not considered necessary to install any apparatus for these two departments. It is probable, however, that in the new department there will be some whirlpool baths. The therapeutic exercises that are so frequently used can be very well executed, without a variety of apparatus seldom used.

Frequently the writer has been asked what constitutes an absolute minimum of apparatus for physiotherapy. The question has always been answered by "an efficient static machine and an efficient light applicator." This is not meant to refute the usefulness of high-frequency machines, because it is possible to get a high-frequency current from a good static machine, by a solenoid and Leyden jars.

Aside from the necessary apparatus there are two vital factors in an efficient physiotherapy clinic or department, namely, a comprehensive but simple system of records and an intelligent personnel.

Professional non-medical assistants are now

GALVANIC
 Batht
 Motor Point
 Interrupted
 Sinusoidal
FARADIC
 Rhythmic Wave
 Galvanic
 Induced
 Electrolysis,

ACTINOTHERAPY
 A. C. Dist =
 W. C. " =

PHOTOTHERAPY
 Deep
 Superficial

HIGH FREQUENCY
 Diathermy-Plates
 " - Cuffs
 " - Water
 Autocondensation A
 " Grounded B
 Electrodesiccation
 N. V. E.
 V. E.
 Max. M. A. to use =

MASSAGE
 Sedative
 Stimulative
EXERCISE Active
 Passive
 Resistive

VIBRATION

Static
 Brush
 Wave
 Sparks
 V. E.

MAR 16 1925

Physiotherapy Commenced

Figure 8. Complete set of rubber stamps used in making out physiotherapy prescriptions.

BEEKMAN STREET HOSPITAL			
DEPARTMENT OF PHYSIOTHERAPY			
NAME	DEPT. No.	HOSP. No.	C. P. D. No.
JONES, Albert	414	39462	23041
PART TO BE TREATED			
Right Elbow			
NOTE—			
Replace dry dressing	FEB 1 - 1925	FEB 9 - 1925	FEB 18 1925
	1 2 3 4 5 6 7	9 10 11 13 14 16	17 18
PHOTOTHERAPY			
Deep			
Superficial	15 G G G G G G	omit	
MASSAGE			
Sedative	5 V V V V V V	OK G G G G G V	V
Stimulative			
EXERCISE Active			
Passive	5 V V V V V V	V G G G G G V	V
Resistive			
VIBRATION			
HIGH FREQUENCY			
Diathermy—Plates			
" - Cuffs		20 D D D D D D	D
" - Water			
Autocondensation A			
" Grounded B			
Electrodecssication			
N. V. E.			
V. E.			
Max. M. A. to use	300		
STATIC			
Brush		10 W W W W W W W	
Wave			
Sparks			
V. E.			
	Progress good—		Discharged T.T. Maximum Improvement—

Figure 9. A complete case record.



Figure 10. The static machine.

seurs who have practiced for some time, and graduates of the ever-increasing physiotherapy schools and colleges will not be found to be so successful as those who have worked for the government. Young women should be discouraged from taking courses in these schools, promoted by laymen, for many do not offer adequate training in the fundamentals of physiotherapy.

The system of records used by the department at Beekman Street Hospital is most clearly understood by a brief description of the trail of the patient.

When a patient is referred for treatment the stamp, shown in figure 2, is put on the hospital or clinic record. The referring doctor makes out the prescription and states what he wishes to be

accomplished through physiotherapy. This hospital or clinic record is examined by the medical director of the department who makes a report in the space indicated. Figure 3 shows the stamp placed on the original record whenever a report of the patient's progress is wanted.

Figure 4 shows the card given to patients referred to the department for treatment. This is presented by them at the record desk each time they come for treatment, so that the patient's prescription can easily be found in the file. Figure 5 shows a card which the patient also presents each time. This is previously purchased at the hospital or clinic office, paid for in cash or, if a compensation case, charged to the account. These two cards are deposited at the record desk. When at the end of his treatment the patient returns the folder containing his prescription blank, the card shown in figure 5 is punched, and both cards are returned to him.

Cases Reported on the Phone

As it is impossible for the medical director of the department to be in constant attendance, the prescription originally filled out, as shown in figure 3, is reported to him on the telephone, as is the arrival of all new cases when he is absent from the hospital. The complete hospital or clinic records and patients are examined by him before the second treatment is given. At the first visit the permanent prescription for treatment is made out by the supervisor of the department, as well as the department index card. (Figures 6 and 7.) This prescription sheet is always kept in a manila folder which shows only the name and numbers.

When the patient is examined by the medical director of the department, the date is stamped on with a rubber stamp and the time of treatments

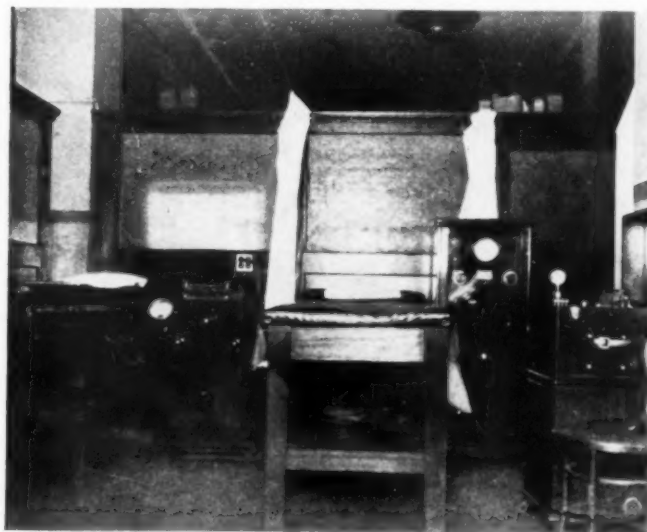


Figure 11. The high-frequency machines.

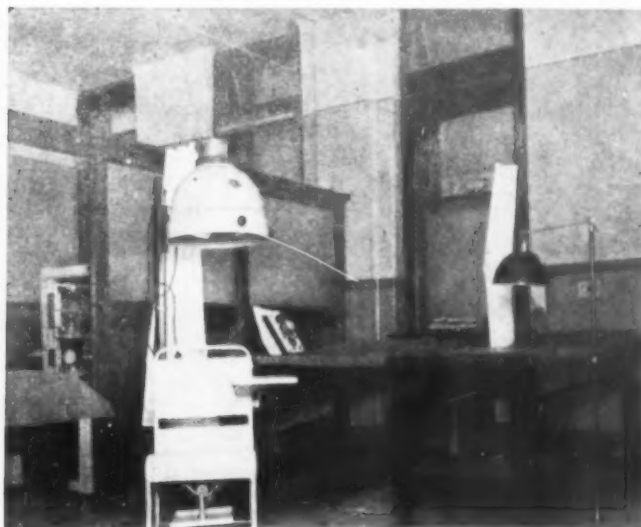


Figure 12. A corner of the massage room.



Figure 13. Two radiant lights and a quartz light.

marked in the column under the date stamp. If the case is seen the same day as referred to the department this will be in the first column.

The modalities to be used in treating the patient are stamped on with rubber stamps. Figure 8 illustrates a complete set of the stamps used at Beekman Street Hospital. This set has also been adopted by the reorganized department at the Reconstruction Hospital, New York, N. Y.

Some department record systems in other physiotherapy clinics have attempted to print out the entire list of possible physiotherapeutic modalities on one sheet, but this wastes space and makes it impossible to record the information as completely as does this rubber stamp method.

Index Card Kept in Diagnosis File

Before illustrating a complete case record the department index card should be described. This is made out at the original admission, and when the patient is discharged from the department and referred to the clinic for final examination and discharge from the hospital, the card remains in the department. Before it is filed away permanently in the dead file, the diagnosis is recorded in the department diagnosis file, so that it is always easy to find out the records and exact data of all cases. The physiotherapy prescription sheet is blue in color. When the case is finished this sheet goes with the complete record into the hospital record room.

Frequently, in prescribing treatments, and particularly with respect to their frequency, it is a help to know whether the case is a compensation

case or whether the patient is paying for the treatments himself. Therefore, compensation case prescription sheets have a green star pasted in the upper left hand corner. It will be noticed also that the prescription sheets do not show any diagnosis. This is intentional, however, since this is not necessary information for the technician and should not be communicated to the patient, especially those who are compensation cases.

The following is a description of the course through which a patient goes, through the out-patient department or the industrial accident clinic to the department of physiotherapy. Figure 9 shows the complete set of records.

On entering the hospital the patient is examined and treated if necessary in the departments mentioned above. When referred to the department of physiotherapy the stamp in figure 2 is placed upon the patient's record, and the patient is given a card (figure 4), and also sold a card (figure 5). If the patient is unable to pay at that time, a receipt from the cash register is given for admission to the department of physiotherapy. Should this case be a compensation case, a card is given them and charged to their account.

With these two cards and the history, which contains all laboratory and x-ray reports, the patient goes to the department of physiotherapy. If the director or his assistant is absent, the arrival of the new case is reported on the telephone. The tentative prescription made out by the surgeon in the out-patient department is also read over the telephone and, if satisfactory, is given that day. It is considered advisable that something be done for the patient at the first visit, even though there is no opportunity for the patient to be examined by the head of the department.

(Continued on page 425)

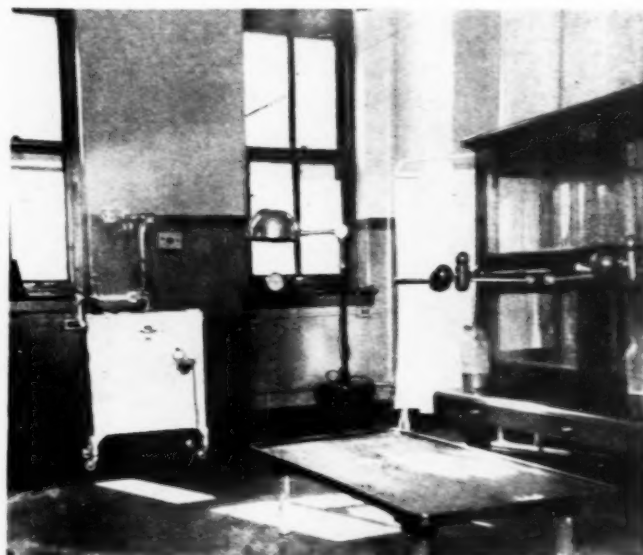


Figure 14. Two forms of quartz lights in the static room.

WHY HOSPITALS JUSTIFY CONTRIBUTIONS

BY H. J. SOUTHMAYD, ASSISTANT SUPERINTENDENT, MOUNT SINAI HOSPITAL, CLEVELAND, OHIO.

LARGE operating deficits, and large hospital bills for service rendered, often combine to give the impression that mismanagement and inefficiency predominate in the hospital. When a contributor is also responsible for a hospital bill this impression may be changed to a conviction, unless the contributor is an informed, observing and appreciative patient. For those who pay hospital bills contributions seem unnecessary in an enterprise which seemingly could make such profit, and does not deserve financial support because of its extravagance and inefficiency.

As hospitals almost universally depend upon contributions to carry on, it is of first importance that the financial problems of the hospital be understood by both patients and contributors.

Contributions Needed to Offset Deficits

Contributions are necessary to offset deficits. Deficits result from cash outlay greater than earned income. A large number of hospitals operate at a deficit. Rarely is a hospital found in which earned income exceeds expense and such a hospital generally renders a low standard of service or the cost of its service is too high except for a limited few who can afford to pay its rates. As deficits depend upon the relation of income to expense, it must be proved that income is relatively low or expense is relatively high. Thus to justify contributions, deficits must be defended, the low earning capacity in excess of earnings must be satisfactorily explained.

While it is generally known that hospitals give free or less than cost service, the amount of such service is unknown. The value of the service donated averages one-third of the total cost of operating the hospital. Therefore, one-third of all hospital patients depend upon the other two-thirds, public contributions, and taxes, to pay their hospital bill. If hospitals were to be self-supporting and carry this amount of free work each patient who paid would necessarily pay the cost of his own care and one-half the cost of a free patient. With the feeling existing among those who do pay for hospital service that the cost is already higher than it should be, it is improbable that fifty per cent could be satisfactorily added to present bills. Taxes and contributions are depended upon to make up the deficit.

True Service Cost Seldom Paid

While the equivalent of service given free is one-third the total number of patients, it does

not follow that one-third of all patients receive service without any cost to themselves. In order to increase hospital earnings, to avoid contributing to dependency and to make hospital service available to those who through pride would not accept free service, the plan of basing hospital rates upon the patient's ability to pay was developed. Patients who pay for service are of two classes, designated pay and part-pay. The former pays at least the cost of his care and usually something in addition, because his economic status justifies a profit on the service rendered. The part-pay patient may pay anything under cost. This group is the largest of the three classes—pay, part-pay and free. Under this plan hospital deficits are somewhat reduced by the amount over cost paid by the pay-patient.

Nevertheless very few patients pay the true cost of their care, because hospital rates, being based on cash outlay for current operating expenses only, do not include such items as rent or its equivalent in interest and depreciation on property. As hospital buildings are usually erected with donated funds and are replaced from the same source, the patient who does not pay perhaps twenty per cent or more over the estimated cost is not paying the true cost. On the earnings side, deficits are occasioned by the volume of service rendered to patients free or at less than cost. It would be unfair, if not impossible, to make up the deficit out of profit on the remaining relatively few who pay the cost or more.

The fact that approximately one-third of a population group is dependent so far as hospital service is concerned seems to argue that hospital deficits should be reduced by giving less free and part-pay service, as in no other essential phase of human existence are individuals non-self-supporting to this extent. This, in general, is the prevailing situation and while intensive educational work along this line would produce some gain, the cause lies deeper in the general economic scheme. If it were decided at once that the public as patients should pay hospital bills, there would be an immediate and large decrease in the use of the hospital to the detriment of public health. The public would feel that it could not afford the cost.

Circumstances Force Free Service

Two main factors explain the dependence upon charity for hospital service. The first is that until comparatively recently hospitals existed for the

indigent only, and the impression that hospital service was free service was well grounded. This situation still exists in some civilized countries. The early hospitals were crude and the chances for life were rather against the patient. With the advance of medical, and particularly surgical, practice, the chances for life in a hospital were greater for the patient than at home and there came a general public demand for hospital care. This demand was met by philanthropy as tax funds could not be expected to bear the cost of the care of the general public and the cost was greater than the public, in general, could afford. Costs were not counted, as philanthropy could be depended upon to make up the difference and so the habit of hospital deficits and receiving of hospital service at less than cost became established. It permitted mounting costs, in the name of advancing science and a higher type of service without a corresponding increase in rates for service.

The second factor is the general improvidence of human kind. Illness and its cost is the last thing anticipated. Nevertheless, the equivalent of six per cent of the population of a large city experiences hospitalization each year. This means that the average family may expect a hospital experience every three or four years. The great majority are unable to meet this financial emergency and must be provided with less than cost accommodations. These people whose incomes are not commensurate with hospital expense feel that they are entitled to the same low rate for service as others, thereby offering a difficult collection problem. If governments cannot secure the return of property and incomes with the threat of penalties, it is hardly to be expected that the hospital, with its serious disadvantages, will be able to fix economic status as a basis for fair charge and collection more successfully.

Cost Not in Proportion to Patient's Income

Considering the earning capacity of the average individual and the average cost of an illness requiring hospitalization, it is perhaps too much to expect that hospital expenses would be generally anticipated. Taking the average cost of hospital

service as \$5.25 per patient day, (the average found in a number of hospitals) and the average length of stay in hospitals as twelve days, the average cost per case is \$63.00. To this must be added physicians fees, loss of wages and additional expense incident to the illness. A conservative estimate of the total cost or loss to the individual, if he were to pay the cost, would be \$200.00. This amount is ten per cent of the annual income of eighty-five per cent of the population of the country and is sixteen per cent of the income of more than half of the population. Considering this, it seems reasonable that a considerable proportion of our population cannot afford the cost of illness either at home or at a hospital.

Therefore, some form of relief is necessary if we are to give this proportion of population the benefit of medical and hospital service. The private physician meets the situation in the home by adjusting his fee to the ability of the patient to pay, and the hospital and physician cooperate in the clinic and hospital ward in giving free and low-pay accommodations, while the hospital contributes service at less than cost in semi-private accommodations. This results,

so far as the hospital is concerned, in a deficit, as the volume of service rendered at an apparent profit is seldom great enough to offset the loss incurred by free service.

Taxation Should Provide for Free Service

Granted that funds above the earned income of a hospital are necessary, the question is one of how the deficit is to be raised. This question is answered in the various political subdivisions, city, county and state, by private philanthropy and taxation contributing in proportions which vary considerably in different communities. Probably the ideal situation from a strictly economic standpoint would be that taxation should provide for all free service rendered, while private philanthropy would make up the deficit resulting from service rendered at less than cost. Practically, such a situation does not now exist and for many reasons should not prevail entirely. However, the tendency should be to develop this situation to its practical limit in each community, thus

Deficits and Service

"A HOSPITAL serving the community in the care of free and part-pay patients justifies operation at a deficit to be made up by private subscription. The complexity and scope of hospital activities justify a cost beyond the ability of the average individual to pay. The value to the community in terms of public health probably justifies deficits on the basis of economic saving alone. Earnings may be increased and economies in operation effected but they should be applied to higher standards of service."

more equitably distributing the load, relieving private philanthropy of a burden and the public of a sense of obligation and dependency upon the wealth of individuals. In other words, the effort should be to develop by this means something of the attitude the public now has toward the public school system.

The foregoing shows one method of eliminating or greatly reducing deficits. It devolves upon taxes and philanthropy or reduced cost of hospital operation to solve the hospital deficit problem.

The possibility of lowering operating costs as a method of reducing deficits raises two principal questions:

1. Are hospitals conducting efficiently the services and activities which they are attempting?
2. Are the services and activities undertaken essential to the patient's ultimate welfare to and sound public economy, with respect to activities in education and research?

Operating Costs Show Much Disparity

The operating costs of hospitals conform over the country generally, so that any question involving the cost of operation applies to the hospital field generally. A study of the individual costs of hospitals reveals no little disparity, partly accounted for by hospitals which receive a volume of personnel service without cost. In the remaining hospitals, however, the same range of difference is found, that is, there are hospitals which do not benefit by free service operating at the same patient-day cost as those which do. It is also observed that while this variation in cost exists, there also exists a considerable range in the standard of service rendered to explain, at least in part, the cost difference.

Other factors, quite apart from the standard of service rendered, such as the type of building, accessibility, degree to which educational activities are undertaken, play an important rôle in this cost variation, and a more thorough study than has been made is needed before an opinion can be confidently expressed as to whether the type of service rendered accounts in full for higher costs. From information of the internal operations of the hospital, it is evident nothing justifies the statement that hospital costs are too high. Public opinion is that they are, but the public almost always believes that the price of anything is high. Moreover, the fact that hospital experiences come unexpectedly and are not planned contributes in a great measure to this feeling. Those operating the higher standard of hospitals defend their policy and while making every effort to operate economically and efficiently

are of the opinion that the present average standard should be raised.

Hotel and Hospital Comparisons

In an endeavor to determine some standard by which to judge the relative efficiency of hospital operation, the hotel naturally suggests itself, as it parallels the hospital more nearly than any other form of institution. Well established as a commercial endeavor, the hotel is thought to be efficient. While the hotel offers the closest comparison, there is wide variation in the character and volume of service demanded by guest and patient. They are alike in that they provide bed and food for an individual in lieu of these accommodations at home. They are alike in that in providing these services their departmental organization bears some similarity. Here the parallel ends, since the hospital cares for an incapacitated individual for whom even the slightest ordinary service must be available for twenty-four hours each day, in addition to medical and nursing procedure never contemplated in hotel service. Hospital service naturally requires a larger staff for a given number of patients than does the hotel for its guests, and obviously the cost for personal service is correspondingly greater in the hospital.

From a material standpoint, hospitals again have greater expense per patient, since medical and nursing supplies must be purchased in addition to the supplies involved in the ordinary care of hotel guests and hospital patients. The hospital must provide and maintain costly, scientific equipment. In building costs, maintenance, cleaning, light, heat and power, hospitals are more expensive, as greater cubage per patient must be provided to maintain a greater proportion of personnel, requiring housing and dining space, to allow such inclusions as operating rooms, larger administrative offices, clinical laboratories, classrooms and storage room, x-ray, cardiographic and photographic departments and metabolism apparatus. In all the major expense items, salaries and wages, supplies, equipment and plant maintenance, the hospital justifies a greater cost per individual.

Lodging Costs Greater in Hotels

Hospital and hotel accounts are so kept that rough comparisons may be made of the costs of corresponding departments contributing to the ordinary care of patients or guests, as distinguished from professional care, plant maintenance and administration. The indications are that, notwithstanding the additional demands upon the hospital, the cost, not the selling price,

of what corresponds to room service in a hotel is greater per individual in the hotel, if rent or its equivalent is included in the hotel cost. The cost of food service in the hotel is much higher. As the hospital is not charged with rent the fair comparison is against the hotel cost without rent. This leaves a considerable margin in favor of the hotel in these departments to be compared to the additional expense incurred by the hospital.

Departments Which Bear Comparison

The departments compared are administration, housekeeping, laundry, maintenance and repair, light, heat, and power. The hospital requires a larger administrative personnel to supervise a larger and specialized professional organization, to record, transcribe and file intimate personal, social and medical histories of patients, to maintain a more elaborate system of bookkeeping and accounting, a larger and more used system of communications, to provide greater public information and reception service and to maintain a larger staff to handle patient movement, that is, reservations, admissions and discharges. A more comprehensive collection scheme must also be kept up.

Housecleaning in the hotel probably costs more because of more elaborate furniture, hangings, floor coverings and window dressings. If clothing, linen and bedding costs are added, as is the case in hospital practice, the housekeeping cost in the hospital must be greater, as a larger volume of these supplies is required per patient, the hospital furnishing patient's bedgowns and other articles of clothing aside from using more bed linens, and textile articles peculiar to hospital practice but not included in medical and surgical supplies.

The hospital laundry is required to turn out at least twice as many pieces per patient as the hotel per guest. More articles of wearing apparel requiring hand work are required of the hospital laundry because of the personnel who are entitled to this service and whose salary or wages are fixed accordingly.

Taken altogether, it is believed that when due allowance is made for the greater volume and wider scope of activities of the hospital, it will be found that the cost of furnishing room service in a hotel is greater than the same service in a hospital, without charging the hotel with rent or its equivalent. Including cost of meals, hotel service costs, less rent, are unquestionably higher. Therefore, it may be concluded that when compared with hotel practice, hospital practice is efficient in departments which, in some measure, are comparable.

From one-fourth to one-half or more of the total of hospital costs is incurred in activities generally described under the term "professional care," comprising medical and nursing care and including such services and diagnostic facilities as laboratory, x-ray, surgical, cardiograph, animal inoculation and metabolism determinations, obstetrical and emergency service, various forms of special therapy, and other recognized treatments involving the use of electricity and expensive specialized equipment. The cost of maintaining educational activities, principally the training of nurses, requiring salaries, text books, laboratory facilities and uniforms, is included in this expense group. Medicines, instruments and other medical, surgical, nursing and laboratory supplies and equipment, and dressing materials constitute the main material expenses.

Service Usually Varies with Costs

These are activities and expenses peculiar to the hospital for which there is no comparison in other fields. It is this group that explains the variation of hospital costs, as will be observed from the fact that there is a difference of over one hundred per cent in the costs of hospitals. Some hospitals have all of the above mentioned services available, while others provide little more than routine nursing care, which in many cases might well be given at home, except that from the patient's standpoint the services can be secured at less cost at the hospital. Thus, those facilities above routine medical and nursing care not available in the home or at the physician's office justify the existence of the hospital and, in a large measure, account for the difference in hospital operating costs.

It is impossible to say whether or not certain of these services are essential. From an abstract standpoint they are. There is considerable question though, whether from the community aspect they are not available in greater abundance than their use justifies. This raises the question and requires a determination of policy as to whether every hospital should develop into a complete unit or whether certain specialized services should be concentrated in certain hospitals of a given community.

Many difficulties would attend the adoption of such a policy under the present form of medical staff organization, though it may be indicated on the basis of economy. It is believed that a generally satisfactory plan should be worked out on the community basis in large centers of population. The alternative is that present institutions be developed to a size where a full complement of specialized facilities would be utilized to the maxi-

mum, thereby fully justifying the existence of the institution, rather than establishing additional small centers with limited service around particular professional or social groups and requiring the transfer of patients or establishing lines of communication between institutions for special services.

Departments Little Used Increase Costs

A study of the whole question is necessary, however, before a sound policy can be decided upon. Emergency service may be mentioned to illustrate the necessity of maintaining a service that is relatively little used. Such a service must be maintained to satisfy public demand. A personnel organization must be set up and certain equipment must be provided to meet a very occasional use. But if such is not provided, and is needed, public condemnation of the institution quickly follows. The situation is met in most hospitals by combining the duties of the emergency organization with some other function, but the use and the income of the department is in no degree commensurate with the effort and expense involved in its maintenance.

Service which the institution is most ready to render is least appreciated by those who derive the benefit. An injured person feels that someone else is responsible for his injury and that he is not responsible for the payment for service rendered. The fact that an emergency case is usually brought to the hospital without consulting the injured is a factor contributing to the patient's unwillingness to pay, as he can easily take the stand that he did not request the service. There is a general feeling that emergency service should be a free service for all. The result is that this service must be provided to meet public demand. Such service always contributes in no small degree to the hospital deficit, not so much for the emergency service rendered but for service for bed patients, and who are universally poor pay.

The question of the essential need of certain special forms of hospital service is not so much one of whether these services shall be available but whether they shall be available to the extent that they now are or may be. Whether routine medical and nursing care is conducted at the least cost involves the question of personnel efficiency and standard of service. Standards vary. All patients get a daily bath in hospitals where the nursing personnel is sufficient in number. In other hospitals the nursing staff is not large enough to permit of this daily practice. Other comparisons may be made to account for the variation of the cost of professional care. Taking the cost of hospital service for a community as a whole, it is difficult to conceive that any reduction

in the hospital deficit should be made by reducing the cost of professional care, especially if this necessitates lowering the average standard of service.

This discussion has been limited to the hospital apart from the dispensary, which is usually a part of a hospital organization, and in which the earnings, in comparison with expense, are much less than in the hospital proper as dispensary service is essentially a free service. About one-sixth of the deficit of a certain large group of hospitals is incurred by such service, which is designed to give medical advice and attention to those who cannot afford to pay the fees of private physicians. The dispensary not only incurs its direct cost, but in referring cases to the hospital increases hospital costs. It is not known to what extent the number of hospital cases referred by the dispensary might be reduced by a careful scanning of such admissions. This, with a persistent effort to lower the average number of days in the hospital, would no doubt produce savings in hospital operating costs without interfering with the standard of service rendered. Savings effected by these measures, however, would make relatively little impression as a means of abolishing deficits and rendering contributions to hospitals unnecessary.

PAMPHLET PUBLISHED ON SIMPLIFIED BEDS

"Hospital Beds," is the name of the Simplified Practice Recommendation No. 24 recently issued by the Bureau of Standards. The pamphlet includes the recommendations accepted by the conference last year composed of representative hospital people, manufacturers and jobbers and government interests. The movement was started in 1913 by the American Hospital Association and the problem was worked out by the A. H. A. committee of general furnishings and supplies under the chairmanship of Miss Margaret Rogers.



Underwood & Underwood.
A typical scene in a men's ward at a temporary hospital in the tornado stricken area at West Frankfort, Ill., March 23. The ward is in the Masonic hall which was quickly converted into an emergency hospital by the doctors and nurses who rushed to the scene.

THE NEW BUILDING OF THE JEWISH HOSPITAL OF CINCINNATI

By LOUIS COOPER LEVY, GENERAL MANAGER, JEWISH HOSPITAL, CINCINNATI, OHIO.

CINCINNATI may boast of its progress in hospitalization. Present developments include a new building which has been added to the Jewish Hospital group, and proposed wings to enlarge the bed capacity of the Bethesda, Children's and Good Samaritan hospitals.

The Jewish Hospital of Cincinnati, incorporated in 1853, inaugurator of the training school for nurses in the state of Ohio in 1881, has expended more than a half million dollars in the construction of a modern seven-story addition to the present main building, and still another two hundred and fifty thousand dollars in the installation of furnishings and the latest equipment. Hospital executives who have visited the new building say that it is unsurpassed in construction and appointments.

Mr. A. Lincoln Fechheimer of Cincinnati was the architect of the building, with Dr. S. S. Goldwater, director, Mount Sinai Hospital, New York, N. Y., as consultant. The building is 223 feet long by forty feet wide and contains 757,000 cubic

has been widely discussed by reason of its spaciousness, efficiency and method of handling patients' trays. This department is located on the ground floor, in a one-story wing in the form of an offset of the main structure. The kitchen covers 3,600 square feet laid out in the following manner:

In the center is a double range, which is large enough to cook food for twelve hundred people a day. One side of the range takes care of the private patients, and the other side, the training school, nurses, employees, semi-private and clinic patients. Flanking the range are soup-kettles, cereal cookers, mixers, steam-cookers and other equipment. Bain maries, set in long monel metal topped tables, add to the attractiveness of the kitchen.

A white tiled wall on the north side of the kitchen conceals the pot and pan cleaning department and also the vegetable peeling and preparation section.

Flanking the main kitchen on both sides and



The new addition to the Jewish Hospital, Cincinnati.

feet. It is constructed of reinforced concrete and contains more than two hundred rooms to house patients and departments.

The building contains many interesting features, among which is the central kitchen which

separated by a tiled wall not higher than five feet, is the bake-shop with its electric bake oven and refrigerator, the tray setting room, the dish-washing service on one side and, on the other, the diet kitchen, presided over by pupil nurses, the



Reception room.

ice-cream making room, and the butcher shop.

Refrigerators, kept at frigid temperature by brine pumped through myriads of pipes, are to be found in each of the above rooms, insuring the proper care of meat, fish, poultry, butter, eggs, milk, fruit and vegetables.

Patients' Trays Easily Handled

The handling of patients' trays in this central kitchen has created a great deal of favorable comment in hospital circles. Steel lined carts containing four shelves, capable of holding twelve trays each, are set up in the tray room in advance of the serving hour.

At the appointed time these tray carts, which are minus heat and are enclosed on all sides,

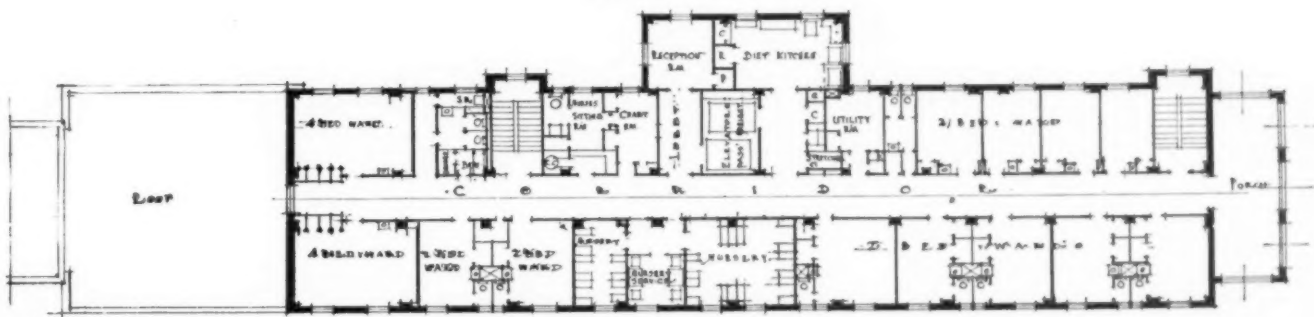
are wheeled out, and placed in front of the "cold table." Attendants, under the direction of the dietitian or her assistant, supply each tray with iced butter pats, ice water, salads from the adjacent refrigerator, silver thermos coffee or tea pots, the dessert and slices of bread.

This is all done in advance of serving the hot food. At the "zero hour," the large tray-carts are swung round, facing the south or private patient's range, and as directed by the dietitian, who consults the order form on each tray, the hot food is placed on patented hotplates. At quickly as the cart is loaded, it is transported by a man and uniformed woman attendant, to the given floor, and as the cart comes to a halt before each private room, the man pulls out the tray while the maid holds open the "screen" door and interior door, enters the room and sets the tray in front of the patient. This is done very quickly and as soon as the twelve trays are delivered, the pair return to the kitchen for another cart.

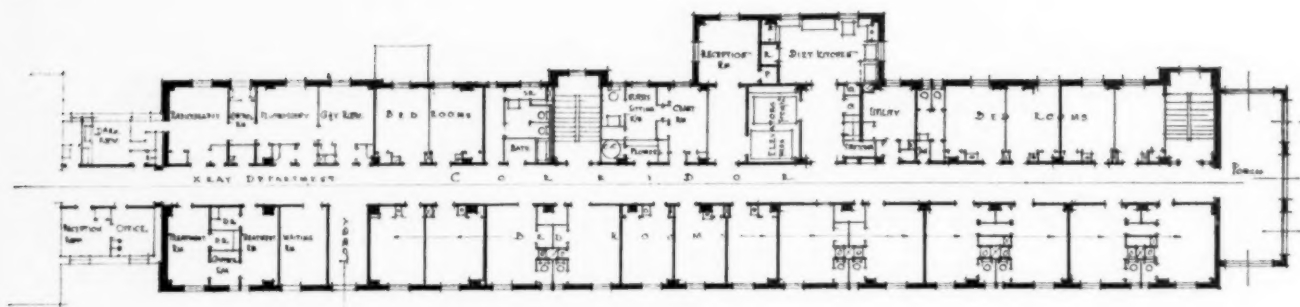
In the meantime, a second pair of attendants completes the same round. Sixty private trays are served in thirty minutes from the time the hot food has been placed on each tray. This system prevents over-crowding diet kitchens on each floor, messing of food, and permits nurses to take care of more patients. Trays are collected after each meal by the same attendants. This insures the return of dishes and silver for sterilization in modern dishwashers in preparation for the succeeding meal.



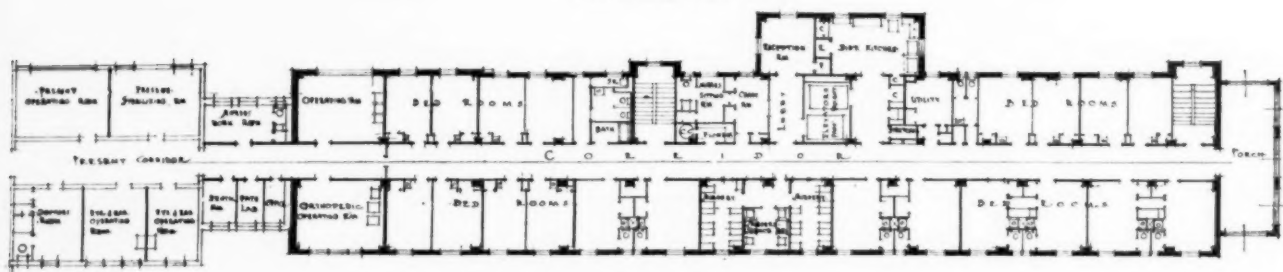
Basement plan.



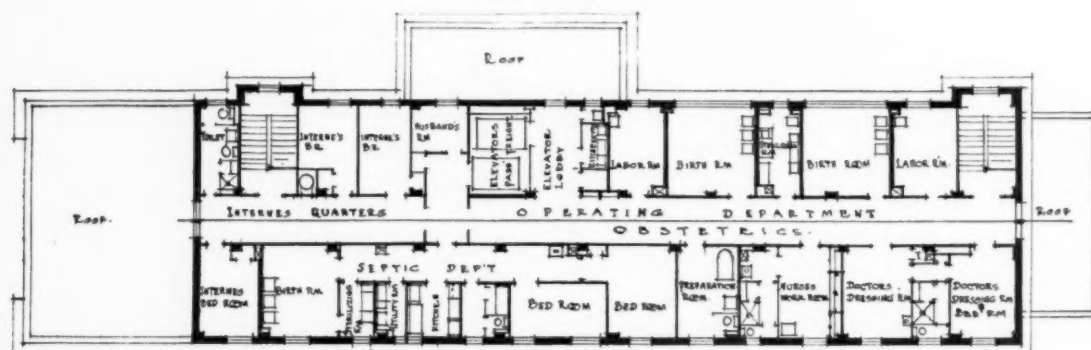
First floor plan.



Fourth floor plan.



Fifth floor plan.



Sixth floor plan.

The first, second and third floors are devoted to medical and surgical cases, and the fourth, fifth and sixth floors to the obstetrical department.

Every Bedroom Has Screen Door

Every bedroom has a screen door, light and airy, which adds to the comfort of the patient and the attractiveness of the long corridor and, at the same time, gives the patient complete privacy when the regular door is left open.

The chart room on each floor is spacious and complete for the nursing service. Steel cupboards for supplies and equipment and medicine cabinets with running water add to the efficiency of the nursing service. Adjacent to the chart room is the retiring room for special nurses. This room is handsomely furnished, and everything has been done to make the stay of the graduate nurse a pleasant one. In the past the special nurse was compelled to stand in the corridor while the family exchanged confidences with the patient. This is unnecessary at the Jewish Hospital, as the special nurse may retire to her sitting room and rest and, at the same time, watch the signal num-

ber that recalls her to the bedside of the patient.

In each diet kitchen is a refrigerator and steel cabinets containing dishes and equipment for immediate use. The garbage can is hidden from view by a steel locker which is built in the wall with direct outside ventilation. A similar cabinet is built in for dish cloths or towels, which hides these unsightly articles from view and does away with their objectionable odor.

Linen closets and stretcher rooms are in the offset of the seven-story structure, close to the service elevators, and behind swinging doors leading to the corridors. This is an important feature, as all noises are obviated.

The utility rooms are equipped with sterilizing equipment, such as sterile water tanks, basin and instrument sterilizers, bedpan sterilizers and warmer, hopper and sinks. A specimen cabinet, open to the outer air, is a valuable feature.

In the alcove leading to the utility room is an ideal blanket warmer and closet for extra supplies.

Each private room has been equipped with a signal system, special night lights, and electric

fans placed on the wall. The doors are wide enough to permit special beds to be wheeled out of the room onto the delightful sun porches of each floor.

The electric signal call system on each floor has proved invaluable in calling the members of the medical and house-staffs, and the lower side lights in the hall-ways used at night makes it possible to turn off the bright over-head lights, and still give sufficient illumination for those on service.

Adjoining the flower room on each floor is a glass enameled steel clothes chute.

An automatic telephone makes for efficient service, as does the ice-water fountains on each floor, which are used for drinking purposes, and for filling thermos bottles.

Another important feature of this new structure is the obstetrical department. The fourth floor contains twenty rooms for private patients, chart-room, reception room, diet kitchen, utility room, flower room, baths, toilets, and sun porches which are duplicated on all of the six floors.

On both the fourth and the fifth floors are double nurseries and rooms set aside for the care of new-born infants. The visitor may look from the corridor through long windows and observe the babies in their bassinets, divided by cubicles. The fifth floor cares for semi-private and clinic maternity cases. Eleven rooms of two beds each, and two rooms of four beds each—a total of thirty beds, is sufficient to care for the busy service.

On the sixth floor is the "septic department," a hospital in itself. Two hundred and fifty square feet have been set aside for this important feature. This unit contains a complete service, making it possible to isolate a patient for an indefinite period without having to call upon the main hospital for aid in any way.

The septic department has its own delivery room, equipped with every facility for the accouchement of the patient. Adjacent to the birth room is a sterilizing plant with distilled water, sterile water tanks, instruments, sterilizers and other necessary equipment. These rooms are located at the west end of the hall. Close by is a fully equipped miniature diet kitchen with its cabinets for dishes, ice-box, stove and tables. Bathrooms and toilets are also in this section, and two bed rooms, furnished as the other rooms in the main hospital, make it ideal for the patient who is assigned to the unit by reason of her septic condition. This department can take care of three patients at one time. It has been equipped with modern lighting and a signal system and has many features that appeal to hospital experts.

On the same floor are two labor rooms, which



(Top to bottom) typical private room; typical utility room; main kitchen; diet kitchen.



(Top to bottom) operating room; birth room; babies' bath room; nursery.

can be used as birth rooms, if occasion demands, also two birth rooms, sterilizing plant, preparation room and husband's room, where the prospective father may await, a nurse's work room, with its toilet and shower for their exclusive use, and two bedrooms which may be used by the attending physician, making adequate provision for the attendants. Built-in wall instrument cabinets, and radio equipment add to the convenience of the service.

On each wall of the three birth rooms, there is an electric time recording clock, which enables the doctor to listen to the fetal heart beats, and watch the moving hand as it ticks off the seconds in unison with the fetal heart beats. The maternity department was made possible through the gift of Mr. Maurice J. Freiberg who gave more than one hundred and fifty thousand dollars toward its building and equipment, as a memorial to his wife.

The entire structure which has been in operation for the past six months, has doubled the capacity of the Jewish Hospital, as it provides for 275 patients.

THE ROLE OF THE SMALL SANATORIUM IN THE FIGHT AGAINST TUBERCULOSIS

(Continued from page 396)

gratifying. Three nurses are giving full time, and eight nurses part time, to care and prevention work in the tuberculosis field.

Two city clinics or tuberculosis dispensaries are held, one on Friday afternoons at the county nurses' office at the courthouse, and one on Tuesday afternoons at the sanatorium for cases where laboratory and x-ray aids are needed for diagnosis. Clinics are also held in the various centers in the county and in the larger rural schools as often as the field nurses find it desirable.

Preventorium facilities are provided in two forms. The sanatorium has sixteen beds for children who need care throughout the year, and the Winnebago County Tuberculosis Association maintains a summer camp for approximately fifty children whose condition is such that they may be benefited by a stay of six or eight weeks. This camp is situated on a high bluff overlooking the beautiful gorge of the Kishwaukee River, on grounds provided by the Rotary Club.

While the title to property of the Rockford Municipal Sanatorium still rests with the city of Rockford, the institution is actually conducted as a combined city and county sanatorium. Both the city and county contribute funds for its maintenance, and patients from the city of Rockford and county of Winnebago are received alike. The affairs are administered by the city and county boards of trustees acting as one board.

ESSENTIALS FOR EFFICIENT CASE RECORDING*

By GEORGE B. LANDERS, M.D., SUPERINTENDENT, HIGHLAND HOSPITAL, ROCHESTER, N. Y.

THE American College of Surgeons, in its endeavor to elevate the standards existing in the hospitals of the country, has placed great stress upon the value and importance of proper record keeping.

Article IV of the minimum standard established by the college reads as follows: "That accurate and complete records be written for all patients and filed in an accessible manner in the hospital, a complete case record being one which includes identification data; complaint; personal and family history; history of present illness; physical examination; special examinations such as consultations, clinical laboratory, x-ray and other examinations; provisional or working diagnosis; medical or surgical treatment; gross and microscopic pathological findings; progress notes; final diagnosis; condition on discharge; follow-up; and, in case of death, autopsy findings."

No one will question the need for effort in this direction, and a comparison of the conditions existing in the hospital prior to the inception and adoption of this standard, with those now prevailing in approved institutions, proves its efficacy beyond a shadow of doubt. It is now becoming generally recognized that proper records, efficiently prepared and tabulated, are the pulse of the hospital by which its professional standing is to be judged. Adherence to slipshod case recording will in future be regarded as indicative of lack of coordination in the internal management of a hospital, while adoption of the minimum standard and enterprise in carrying it out will signify a hospital full of promise for future growth and possibilities.

It has been graphically stated that records to the hospital are as essential as is water to the river or hands to the clock. Both the river and the clock typify existing avenues of usefulness, but lack the essentials necessary to attain their predetermined objectives. So it is with record keeping. Unless the hospital encourages proper record keeping and provides the essentials by which such records may be conveniently obtained and properly supervised and housed, it is certain to fall short in the final results.

From years of experience with this problem in various hospitals I am convinced that the prime essential is the will on the part of the hospital and the profession to accept the principles of the college program and to endeavor zealously to ex-

cute its fundamentals. Provided the will to do is present, it matters but little what form of records be adopted, whether those outlined by the college or those suggested by the various other agencies interested in this problem. Elaborate and extravagant forms amount to nothing where a dilatory spirit fails to exert the thought and energy required. The important thing, after all, is what the records show rather than the particular form provided and adopted.

It cannot be asking too much of any reputable physician that the complaint or condition of any patient requiring hospitalization be recorded upon his admission to the hospital. Surely the time has passed when there should be any mystery about a human soul seeking the assistance of a group of men, and of an institution existing primarily for the safety and security of its patrons. The time has come when a hospital has a right to require such admission data, because of its own reputation and that of its appointed representatives.

What Records Should Contain

It must be accepted that no record is complete without certain identification data, such as a complete family and personal history, and an account of the present illness substantiated by a thorough physical examination. It is equally essential that some record be kept of the patient's progress while he is a resident of the hospital, for by this means only can the intimate, personal touch between the physician and patient be established. If a patient is admitted and the hospital accepts responsibility for his care it cannot be considered as asking too much that the medical attendant at regular, frequent intervals shows by a written note his interest in the patient and calls attention to his progress. Progress notes are the guideposts along the patient's pathway, indicating just which way he is travelling by calling attention to incidents in his hospital career, and they serve to shape his journey toward a successful termination. It matters not just what method of history or record taking is adopted so long as the end desired is accomplished.

In some institutions the care of records is referred to the intern staff and with some measure of success, while in others the attending physicians feel it to be their responsibility. No set rule can be established to cover every detail. So long as the will to do is present and the institution is functioning as a unit in the care of its patients

*Read at New York sectional meeting of the American College of Surgeons, Albany, N. Y.

results will come without cumbersome or irritating regulations.

Committee Should Supervise Records

It is, of course, necessary that there be proper supervision of records, and I believe this should be done by a committee of the professional staff. If certain members are appointed who appreciate the value of systematic records, and who by reason of particular adaptability and qualification sense their responsibility, better records will be procured and greater efficiency will result. Record keeping should be made as easy as possible. In fact the whole atmosphere in the record room and about the hospital should be such as to invite frequent visitation to and consultation with the record department. This calls attention to the fact that the proper personnel in the record room is of essential importance. Clerks blessed with persuasive personalities and a sense of discretion prove important factors. A pleasant, conveniently situated record room, plus the atmosphere created by competent and likeable personnel, invites cooperation and at the same time precludes the objections so often raised to systematic record keeping.

Stenographer Should Accompany Physician

The typewritten history is much to be preferred to the written record. Legibility and clearness are at once obtained and valuable time saved. The time is coming, and is not far distant, when the special record stenographer will be considered as an essential. If the hospital continues to ask for more detail in its patients' records, it is only just that a special person be assigned to accompany the physician on his daily visits, to relieve him of the annoying details of hospital routine. Assistance of this character serves not only as a constant check and reminder to the medical staff, but also assures more frequent and complete records, promptly compiled, both readable and readily accessible. Records thus obtained give greater impetus to analysis and offer less opportunity for error.

Some attention should be given to the final note entered as a patient leaves the hospital. It is not sufficient to use stereotyped words and phrases, which after all serve no useful purpose. What should be of concern is the condition of the patient upon discharge with reference to his normal health, and the reasons for or against a return to his usual avocation. The fact that a patient is leaving the hospital does not justify a lack of interest in his future on the part of the hospital. He should be made to feel that interest in him personally and concern as to his progress are ex-

ercised until his complete recovery.

A follow-up system of some sort is essential to completeness of record keeping. The personal interview at frequent intervals is to be encouraged. However, here again the method adopted means little in comparison with the object desired. Where the conscientious spirit exists what might appear to be incomplete methods materialize in accomplishment far beyond anticipation. Much real service may be rendered even with limited equipment, provided such equipment is kept constantly in good working order.

Effort More Important Than Money

No attempt has been made to outline the nature or extent of working materials necessary. This problem must be regulated by the individual institution. It has been shown that equipment necessitating a large outlay is not necessary. Good records are being procured and preserved with what might appear to be inadequate and poorly designed essentials. Experience has demonstrated beyond a shadow of doubt that the expenditure entailed is not so much a matter of money as it is of effort. But granting that additional outlay is necessary, I have no misgivings as to the willingness of the governing bodies to provide freely actual essentials when it can be shown that better work will result from better tools.

Analysis Conference Real Essential

Much has been said about regular staff conferences and yet the half has not been told. Here in groups or in a body, as may suit the individual instance, the staff gather and carefully analyze their work. One of the really encouraging signs of the entire standardization movement has been the establishment of conferences of this character in ever increasing numbers. All are realizing the value of analysis and are approaching the situation in the truly altruistic spirit. No more satisfying or healthy symptom can be shown than the gathering together of a group of professional men engaged in the same worthy occupation, free from prejudice and malice, ready to have their records discussed and desirous of correcting their errors. Greater protection to both hospital and profession is assured and I believe more scientific methods of treatment are adopted through the free interchange of ideas in staff conference. The analysis conference is a real essential in the program, the lack of which invites complications and handicaps.

Records Must Be Accessible

A word or two should be added concerning the care of the completed history. After much time

and labor has been expended upon the compiling of the history, proper machinery should be installed by which the greatest possible usefulness can be made of the finished product. It is the height of folly to look upon the art of history taking as simply so much detail which must be attended to. Each history produced in accordance with the promptings of the minimum standard should be considered as full of possibilities, the realization of which will depend solely upon the initiative and enterprise of those who refer to it in search of information and help for future endeavors. Facts carefully recorded but not made use of fail in their purpose. The real function of these facts is to provide material for research and culture and to aid the investigator in perfecting his work in the care of those who are yet to come for treatment. Unless these facts are readily accessible, and so compiled as to add weight of evidence by numbers, no definite conclusions can be arrived at. An interested seeker for knowledge cannot base as safe and sure an opinion upon one individual instance as he can upon an accumulation of like conditions which have been carefully verified and from which definite conclusions have been drawn.

Records should be so cared for in the record room that any rightful investigator may easily gain the information desired. In the light of modern procedure the simple filing away of any history as an entity is poor practice. Not only does that history contain the name of the patient, his history in its various parts, and the statement of condition requiring hospitalization, but also his progress through illness, his condition upon discharge and some record of follow-up over an extended time. No one part of such a history could be considered of real value without the accompanying, substantiating data. If then all parts of the record are essential, both as to individual parts and to the whole, it should be so preserved as to make available either the part or the whole.

This can be accomplished by an efficient index system with recognized and accepted cross index advantages. A man desirous of actually producing something helpful in the science of medicine or surgery can be materially helped in his research by material which is easily accessible and so correlated as to minimize waste of time and energy. The system adopted need not be cumbersome or hard of interpretation. In fact it is possible that simplicity in design is more prone to invite consultation and to insure better results. The interested and progressive physician is not satisfied with his present fund of professional knowledge, but is constantly endeavoring to perfect himself and to aid in the perfection of others.

The delinquent is a problem in all walks of life, and so it is in the matter of record keeping. He may not see the value of this or that procedure and may object to what he terms unnecessary regulations. Article IV of the minimum standard quoted above is the answer to his protestation. If he cannot or does not qualify the institution is better off without his ministrations. In my own hospital this problem occasionally comes up. However, regulations have been adopted which, thus far, have been successful in its solution. Should an incomplete record reach the record room the attention of the attending physician is immediately drawn to the omissions. Sufficient time and opportunity are allowed to meet the requirements and if they are not conformed with, a formal notice is sent through the mail, plainly stating that unless such records are complete and satisfactory to the record committee within a certain specified time the privileges of the hospital will be withdrawn from the defaulter until such time as all requirements set forth are satisfied. Remarkable success in this procedure has been the rule, for in comparatively few instances has the physician failed to comply with the request and rule established. It is probable that though the instance may temporarily irritate, yet eventually the idea of orderliness and attention to detail will develop and subsequent experiences often show appreciation of the straightforward, impartial attitude taken by the hospital. It is fair to assume that an institution particular in this detail will of necessity be more punctual in day by day contact with its patients.

Patient Is First Consideration

After all, the thought of the actual function of the hospital should ever be present. It does not exist primarily for any particular group or groups, but for the patient who is in need of help. It should never allow anything to transpire which militates against its set purpose. When, on the other hand, it has been definitely shown that any course of procedure serves better to protect the patient's welfare the hospital should not fail to embrace its opportunity, no matter how small or insignificant.

Experience has shown record keeping to be a necessity, and no institution can expect to exist if it denies itself the benefits to be derived from efficiency and cooperation in this important department of the hospital.

The Western Physiotherapy Association held its seventh annual meeting in Kansas City, Mo., April 16-17 under the presidency of Dr. L. A. Marty.

The Mississippi Valley Conference on Tuberculosis will meet in Lansing, Mich., September 15, 16, and 17, 1925.

RESEARCH LABORATORY OF THE NEW YORK NURSERY AND CHILD'S HOSPITAL

BY HYDE AND SHEPHERD, ARCHITECTS, NEW YORK CITY, AND LYNNE A. HOAG, M.D., DIRECTOR, RESEARCH LABORATORY, PEDIATRIC SERVICE, NEW YORK NURSERY AND CHILD'S HOSPITAL, NEW YORK, N. Y.

RECENT advances in scientific medicine have made it imperative that every progressive hospital equip itself with adequate laboratory facilities. This is fully as important for specialized hospitals as for those more general in character. Such a modern hospital laboratory, especially when used for teaching purposes in connection with a medical school, must perform at least two services in striving for the ultimate ideal of providing patients with the best scientific medical service. It must offer to the staff those tested laboratory procedures which aid in the differential diagnosis of diseases. In addition, it must be prepared not only to keep abreast of the progress in other laboratories, but also to contribute to that progress through its own investigative work. A physical separation of these two elements entails a great reduplication of equipment and effort which can be accomplished only in the largest laboratories.

Owing to the impossibility of such a separate grouping in the new laboratory unit at the New York Nursery and Child's Hospital, New York, N. Y., it was necessary to plan the space so as to allow great flexibility for expansion of certain types of work at the expense of others, as the occasion demanded. This has been accomplished by providing all the work rooms with standardized furnishings, such as gas, drains, desks, water, air and electric outlets. In addition, each room contains its own special movable equipment which can be removed and space provided for new procedures or expansion of previously used ones as demanded by the nature of the investigative work in progress at the time.

Quarantine Building Remodeled

When preparations for the addition of a new laboratory unit were made, it was decided that the hospital should alter an existing structure intended as a quarantine building but part of which had been used in recent years as a laboratory.

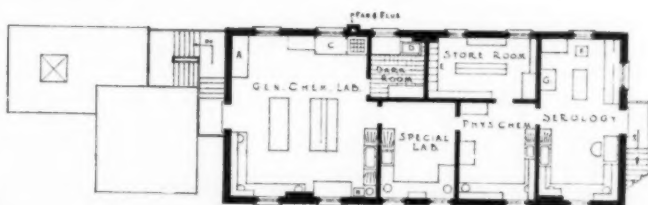
This building was located in the court of the main hospital and was well adapted for the purpose for which it was to be remodeled. The outside walls were of brick masonry and the floors of concrete slabs, supported by steel girders, which made the building thoroughly fireproof. Although a certain amount of serviceable equipment was available, because of the small laboratory having been installed therein, the plan to convert the building into a research laboratory with every modern feature necessitated demolition of many of the existing partitions and erection of new partitions in order to change the arrangement of the rooms. It was also necessary to take down and reset much of the existing equipment, including iron stairs, sinks, toilet fixtures, and radiators, and to build new windows to provide better light.

When the small laboratory was in operation the animals used for experimental purposes were housed in temporary wooden cages under an old stairway. An addition to the building was erected on the west end, having terra cotta walls, covered with cement plaster on the inside and stucco on the outside, cement floor and drain. This new animal house is lighted both by skylight and windows, so that it provides ample ventilation. Heat is furnished by means of a coil and wall radiator. The metal cages are supported on specially constructed racks which permit easy access to the cages and facilitate their removal, if necessary.

One of the most important items in the alteration work was the piping; because, in addition to the usual service required in any building, this laboratory required special equipment for draining off acids, for compressed air, and for special steam connections to the laboratory equipment. Extra heavy cast iron piping was used for the ordinary drains from toilets and soapstone sinks while the hot and cold water was supplied through solid brass piping. Lead pipe from the acid sinks was connected with a soapstone diluting tank which, in turn, was connected with the sewer. In



First floor.



Second floor.

this manner any chance that the drain pipes might be damaged by the acids was eliminated.

Heat Supplied from Main Building

Wrought iron pipes were used to bring the compressed air from the storage tank in the main hospital building as well as the gas and steam used in the several laboratories. In order to secure the proper distribution of outlets, the revision of the electric lighting system was necessary to provide dome reflectors for the work rooms as well as ample base and wall receptacles for necessary light and power with switches conveniently located. An electrically driven suction fan for eliminating gases and fumes from the steam bath was installed and a special flue built for that purpose.

On the first floor the large laboratory is devoted to bacteriology and pathology, as it is provided with complete equipment, including autoclave, dry heat and sterilizers, centrifuge, a large incubator and a smaller one for special purposes. The pathology service has standard apparatus for tissue sectioning, and space and receptacles for filing slides and specimens. The obstetrical laboratory serves for routine urine examinations and clinical hematology.

The office which is used by the head of the department, is a well-lighted room with pale green walls and a green mastic flooring. The metal filing cases for departmental business are kept here.

A place for quiet study is provided for in the library. The walls and woodwork are painted a soft green and the flooring is the same as in the office. A small collection of current periodicals and recent text-books dealing with obstetrics and pediatrics furnishes a working library for the laboratory workers and house officers. The room also serves for weekly staff meetings.

Chemical Research on Second Floor

Three of the rooms on the second floor are being used for chemistry. The large room contains the general equipment and is used for both routine and research work. In addition to the usual chemical apparatus, such as balances, hood, steam-bath and water still, there is some special apparatus, including electric drying oven, high speed centrifuge, refractometer, gas analysis burettes and a special burette stand. The latter serves as a support, above desk level, for the more commonly used solutions, each bottle being provided with its own automatic burette, allowing rapid and accurate measurement of the solution. Adjoining this large room is a convenient dark room for the colorimeters and polariscope.

The two smaller middle rooms contain special

apparatus, including a bomb calorimeter and a complete conductivity outfit. The physical chemistry room is reserved for methods requiring an atmosphere free from the fumes of acid and ammonia. It can be completely closed off from the adjoining rooms.

As many serological procedures are necessary, studies of an immunologic nature are made in the serology room. It contains a large centrifuge with interchangeable heads, a constant-speed slow kymograph and special water-bath for studying the reactions of sera on isolated muscle strips, a constant temperature inactivating and incubating water-bath, and a high speed electric motor stirrer.

The storeroom has wall shelf space up to the ceiling, providing sufficient room for the storage of stock supplies of glassware. The central shelves are narrow enough to provide alphabetical arrangement of chemicals in rows one bottle deep, greatly facilitating the location of a desired reagent.

Arrangement Gives Maximum Space

This arrangement of rooms is very compact and the maximum amount of space is available, since there is no hall or corridor on either floor. Access is afforded on both first and second floors at each end of the building. All work benches and furniture are stained brown and varnished, the tops of the service equipment being treated with a special chemical acid-resisting finish. The floors, which were originally of maple, are covered with mastic flooring which is a waterproof and acid-proof material. Lighting for the work rooms is improved by the use of prism glass in the upper sash and transom of the north windows, which intensifies the natural light and throws it towards the middle of the room. This, with the walls painted a light cream color, makes the rooms bright and cheerful.

In addition to the space above described, the pediatric house-officers have a ward laboratory in the main hospital building on the same floor with the patients. This is used for routine urine examinations and clinical hematology. Next to this ward laboratory is the metabolism unit, which is an extension of the research laboratory. It consists of a respiration chamber designed especially for young children, an absorption table, balances, barometer and other accessory equipment.

Blodgett Memorial Hospital, Grand Rapids, Mich., celebrated the ninth anniversary of the occupancy of its present home March 31, 1925. An anniversary card was presented to each patient and each tray served at noon was decorated with a pink rose. Patients to the number of 34,915 have been cared for in the building.

COMMON ERRORS IN PLANNING MENTAL HOSPITALS

By S. W. HAMILTON, M.D., DIRECTOR, DIVISION ON HOSPITAL SERVICE, NATIONAL COMMITTEE FOR MENTAL HYGIENE, NEW YORK, N. Y.

IN A single article an attempt to discuss fully the principles of hospital construction for the mentally ill, and to list all the errors that have been committed in planning such buildings would be almost impossible. It is left for the writer to discuss some of the ways in which errors are most often made and to point out casually some of the better methods of planning.



Figure 1. Artificial plateau.

Let us assume that a good site has been chosen where the architect and landscape gardener can unite their efforts in developing an institution whose native beauties will be enhanced by human

plateau where every structure will stand on the same level. Advantage can be taken of each irregularity in the landscape to make the grounds still more beautiful, whereas if they are leveled off only a formal order can be secured and the landscape will be entirely dependent on the trees and shrubs for effects that the ground curves should make.

Brighten Up Dark Corners

Close attention should be paid to planning the building so that there will be no dark corners. These are especially apt to be found at the end of a corridor whose light comes through glazed doors or transoms. Patients often complain of the depressive effect of living in a ward with dark corners, even if artificial lights are kept burning. A judicious distribution of alcoves allowing sunlight to shine directly into the corridor will make all parts of the ward light and attractive. In a well-studied building at the New Hampshire State Hospital, Concord, insets have been made in the outer wall at certain points in order to bring windows to the corridors. The architect should not hesitate to do this, if necessary, but often can arrange the matter in even simpler fashion.

Consider Windows Carefully

The height of the window sill from the floor is sometimes considered a standardized matter and



Figure 2. Utilization of slope.

skill. In placing buildings an attempt should be made to use the native contours rather than to destroy them in order to create an artificial

is thus not given careful attention. It is a great pity to find costly structures with window sills so high that a person cannot have a view when

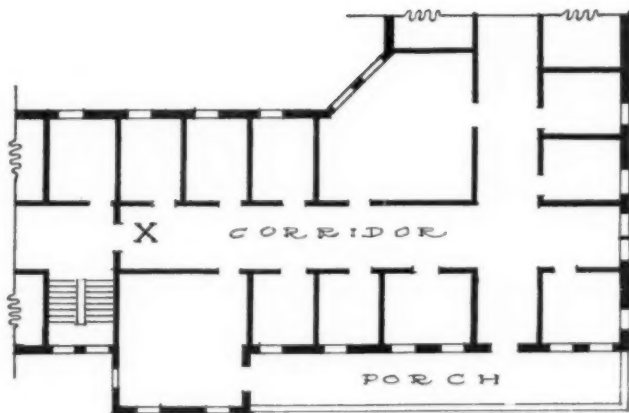


Figure 3. "X" This part of the corridor is always dark.

sitting in an ordinary chair. There are times, too, when the window sills could be close to the floor as, for instance, when the end of a corridor depends on such a window for its light. The Western State Hospital Staunton, Virginia, has a new building in which this plan has been followed with excellent effect.

Window guards seem necessary as long as excitement and confusion exist. There seems to be no ideal type, but some kinds are less objectionable than others. Straight bars are strong, easy to mount, and simple to look between, but as they have unpleasant connotations for many, they

should be avoided. An ornamental grill of iron or brass should be chosen for places where the guard is outside the window.

A few windows—fewer than one might surmise—must be guarded on the inside, because of the impulsive effort of some patients to test the strength of the window frames. A heavy wire mesh set into a strong wooden frame is probably the most satisfactory arrangement. A perforated iron plate cuts off both light and view. If the whole guard can be arranged to slide sideways into the casing, so much the better.

Another type of guarded window is more attractive and, when properly installed, is quite serviceable. Strong metal muntins are used and

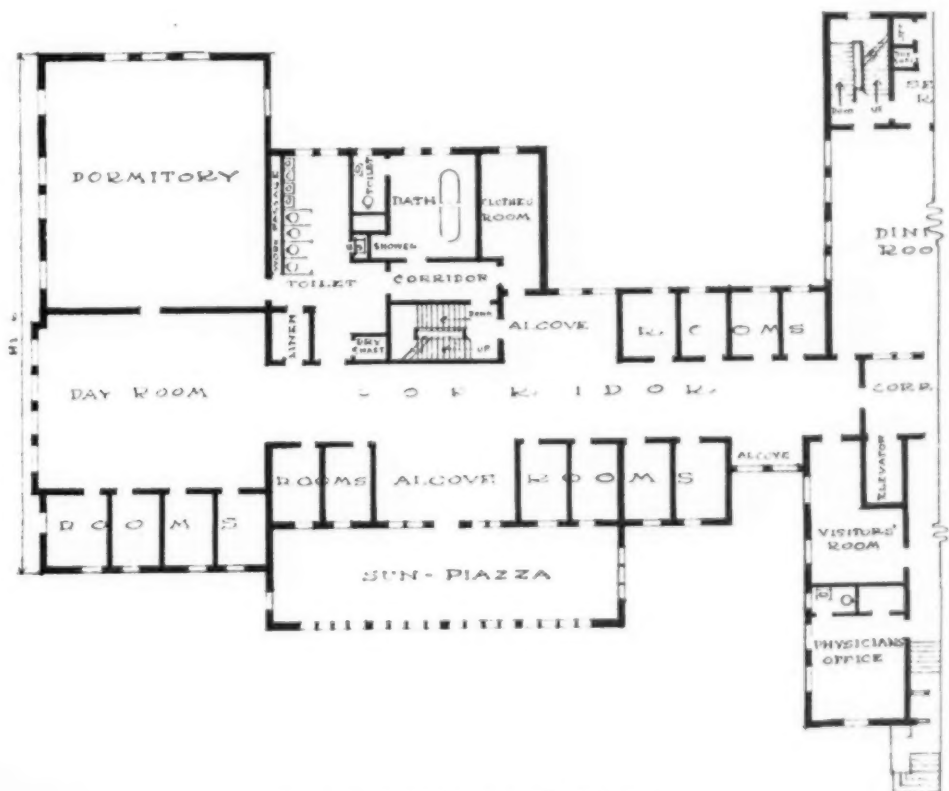


Figure 4. This wall plan avoids dark corners.



Figure 5. Window sill $4\frac{1}{2}$ feet from floor.

the panes—not over five and one-half inches wide—are of heavy glass, one-quarter to one-half inch thick and perhaps poured over netting (so-called "fireproof" window glass). But unless there is an outer guard over at least part of the window, it may be necessary to prevent the window from opening more than six inches—a disappointing arrangement. The outside guard may simulate the sash and not disclose its true nature to the onlooker, but the patient inside is not misled.

Economize Travel in Wards

Wards should be laid out with a view to economizing the nurses' travel. Central control should be studied—the place where the nurse naturally places herself should command a view of the



Figure 6. Large window illuminating corridor.

principal points of patient activity. The utility room should be between the points where bedpans and water bottles will be needed, rather than at the end of the ward, the point most distant from some of those beds.

Faults Found in Plumbing

The arrangement of the plumbing will make a great difference with the ease of administration of the building; and after a few years, when replacements become necessary, the cost will depend very largely on the accessibility of the pipes. The three following errors are most common: (a) Pipes standing exposed in rooms that are used by patients. Bedrooms, sitting rooms, and even dining rooms are too often decorated by piping of various sizes extending along the ceiling and down the side walls. This is unnecessary and almost inexcusable. People try to surround themselves by beautiful and harmonious structures, realizing in times of leisure, as well as times of weariness, the favorable effects of pleasant surroundings. It is of equal importance that the sick should have pleasant things to see, rather than ugly fixtures. Exposed pipes are an incentive for the depressed patient to suspend himself, and are thereby a frequent cause of accidents. (b) Toilet seats, flush tanks, and washstands, sometimes even bathtubs, are chosen without regard to the unusual usage that they may have. In a hospital for the mentally ill there are always a number of patients who are idle because of their

loss of interest in normal things, and among them are some who, because of their delusions or from merely exaggerated curiosity, are disposed to play with and disconnect any movable joints. Flimsy connections, whether pipe or rod, are not infrequently bent and thus rendered useless. This situation can be easily avoided. There are on the market fixtures that are strong without being ungraceful and are simply but firmly mounted. (c) In a few buildings pipes have been buried in partitions where they are hard to reach. Deterioration in such cases need not be taken into consideration, as practical experience indicates that plumbing is renewed every thirty or forty years, even if it has not deteriorated. People become dissatisfied with the mechanical contrivances that were formerly acceptable and rather than replace them piecemeal put in a whole new outfit. Meanwhile, leaks must be treated, and tearing open the walls and floors is a costly procedure.

The best solution of the pipe problem is to assemble such structures in galleries. In a new building it is a simple matter to have such a gallery run from basement to attic, and this plan has been followed in much of the most recent construction, notably hospitals erected for the U. S.

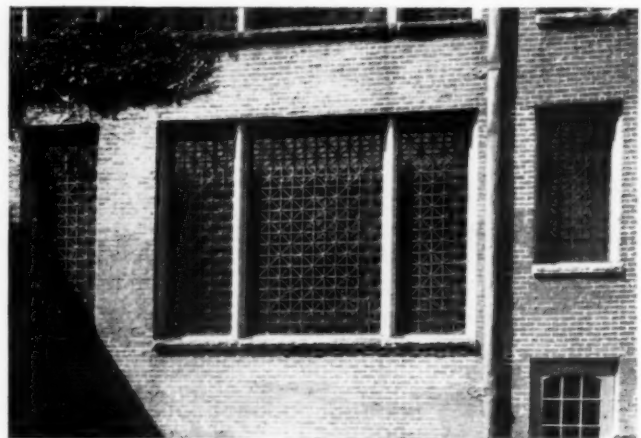


Figure 7a. Ornamental grill for disturbed ward.

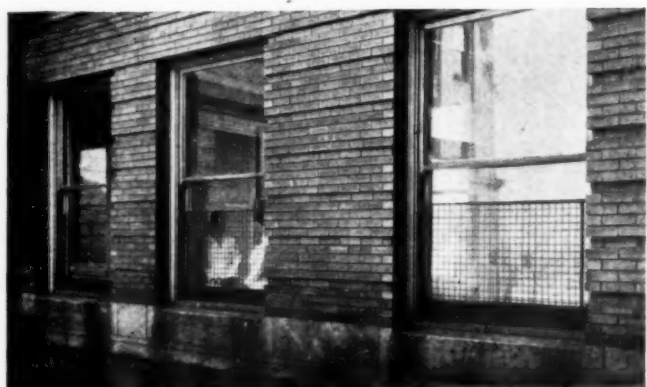


Figure 7b. Unobtrusive window guard in a general hospital.

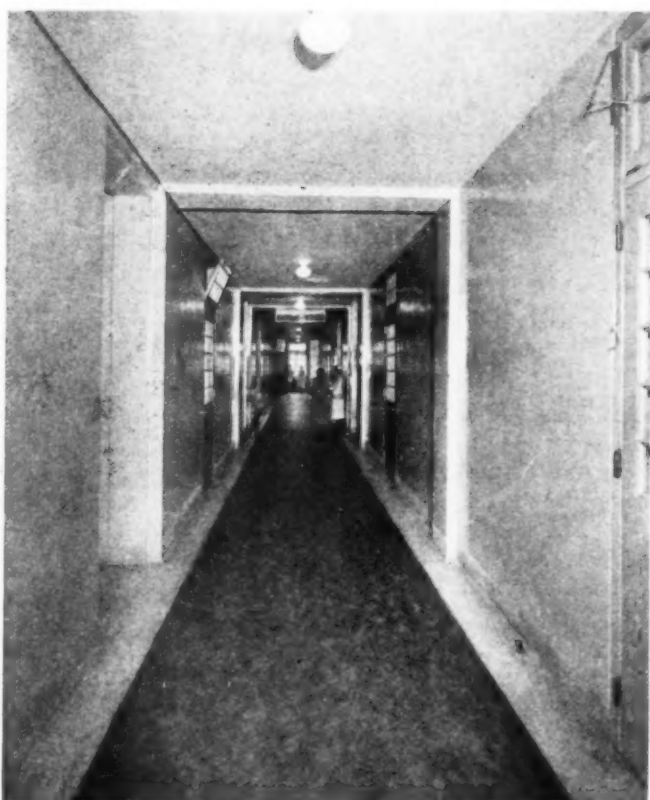


Figure 8. Nurse's office is at far end of this corridor; while photograph slightly exaggerates the distance, it does not show the full length of corridor.

Veterans' Bureau. It is also desirable that as little of the piping as possible appear in the toilet and wash room. This can be arranged by the proper selection of equipment. There are excellent toilet seats attaching either to the wall or floor, so that no piping is exposed, and flushing is accomplished by a push button. A similar arrange-

The method of lighting by electricity is universal, since it is free from dangers inherent in gas and kerosene. Yet adequate attention is not always given to proper type and distribution of fixtures and switches. One hospital has different currents for two groups of buildings, so that a serving machine cannot be moved from the tailor shop to the sewing room without the purchase of a different motor, for one is equipped with alternating current, the other with direct. Often special fixtures are installed which require peculiar shapes of bulbs and necessitate special purchase and storage, all of which increases the unnecessary labor of electricians in making correct replacements, since three buildings may require three kinds of bulbs.

The most frequent error of distribution is that of putting too many lights on one circuit, especially in sleeping quarters, so that all patients must fall asleep and waken at the same moment, or the repose of some is disturbed when others need light. A good arrangement is a series of baseboard lights on a special circuit. Corridor lights sometimes throw beams into the eyes of bed patients, and too often dormitories are lighted like a dance hall. Switches are put in all conceivable places; in one instance a physician must cross his bedroom and reach behind the bureau to turn his light on. Buildings for restless patients have been equipped with push-button switches, and guarded switches have been so installed that a child could disrupt them. Such blunders are directly due to lack of conference between administrator and architect. The hospital electrician should also be called into confer-

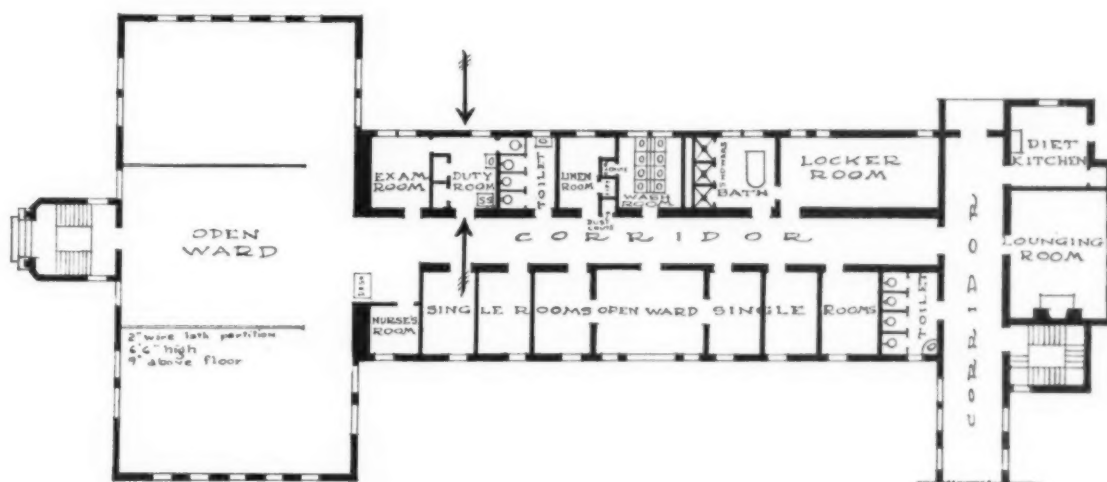


Figure 9. Nurse's service room in middle of ward.

ment can be obtained in a washstand. Bathrooms and toilet rooms, as a rule, should be provided with floor drains, and the floor made of some impervious material.

ence before plans are accepted.

Methods of heating have been debated since the very beginning of mental hospitals in this country and yet no decision has been reached. Hot

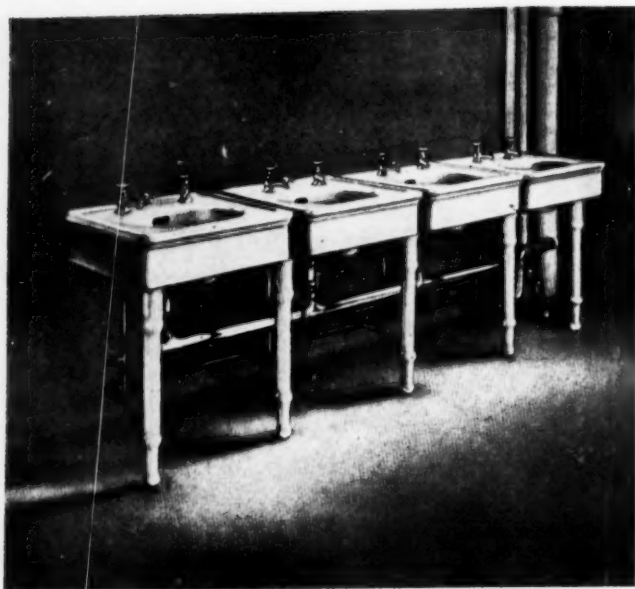


Figure 10a. Washstands whose fittings are frequently meddled with by patients.

air has the advantage of not burning a patient, even though he expose himself directly to it. Nevertheless, a building heated in this manner is hard



Figure 10b. Simple washstand with no exposed attachments.

to regulate. The side against which the wind blows is apt to be too cold, and curious, even inexplicable, things happen to the system so that some section of the ward is never at the desired temperature. If hot air must be used, there should probably be a separate coil to heat the air

Difficulties of Steam Heating

Steam is most often used. The conducting apparatus is simple and the steam can be carried much more than a mile with very little loss, if the pipes have the proper slope and are rightly insulated. Many existing hospitals started out with a steam plant and found it impracticable to make a change because of the great expense involved; hence any additional buildings must be equipped with the same apparatus. The architect can avoid having unsightly radiators placed

about the rooms and halls just as he does in a private dwelling.

Probably the most satisfactory arrangement is to have the radiators placed in recesses in the walls and covered by a wire-mesh guard. This guard should be held by very few bolts and the bolts should not be subjected to tampering by an idle patient. It is better to hang the radiator on the wall, rather than have it rest on the floor, for there is apt to be an untidy place close to the radiator legs. The guard should not come all the way to the floor and the recess should be rounded at the bottom so that

dust or other things collecting there and falling to the bottom can be easily brushed up. In one place such an arrangement was found with one addition, namely, a ridge had been placed at the bottom of the recess so that anything thrown there



Figure 11a. Toilet seat whose fittings are easily tampered with by patients.



Figure 11b. Toilet seat with no exposed attachments.

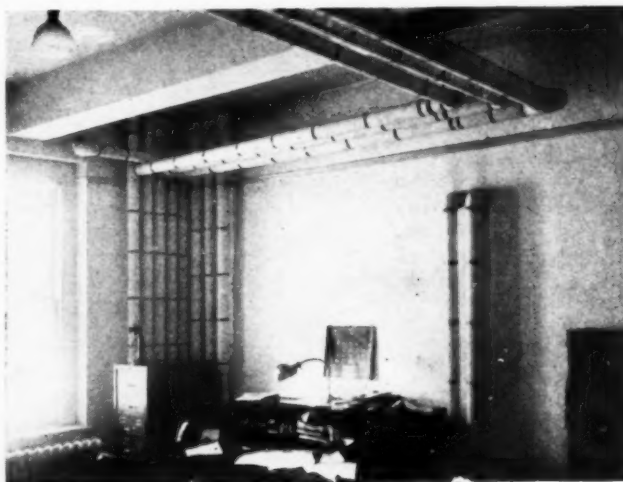


Figure 12. Physicians' office used as a pipe gallery.



Figure 13. Exposed pipes and radiators in a dormitory.

cy, N. Y., designed to accommodate 2,000 patients, will be heated in this manner. Control of tem-

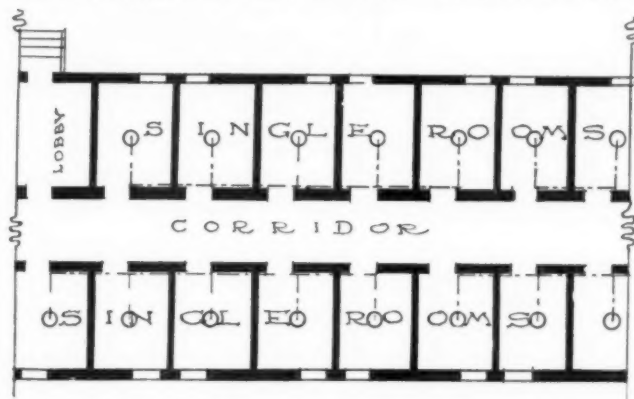


Figure 14. Several single rooms on one circuit.

perature seems to be easy and there appears no difficulty in conducting water any desired distance.



Figure 15. Pipe gallery where repairs can easily be made.

would necessarily be retained or would be difficult to remove.

Hot water seems to be the best heating fluid, as it is the choice of an increasing number of builders. The new mental

hospital at Mar-

The errors most frequently made in mental hospital planning are not inherent in the problem and can be avoided. The repetition of these errors is usually due to lack of competent advice which should be secured when new buildings are planned.

PHYSIOTHERAPY DEPARTMENT OF BEEKMAN STREET HOSPITAL

(Continued from page 404)

ment of physiotherapy.

On completion of this treatment, the patient is told to report for the second visit when he can be examined by one of the doctors in charge. When the patient originally reports to the department a prescription is made out upon which the family name of the patient is printed in capital letters. The numbers which apply to the patient are also inserted in their proper places and a history card for the department file with a diagnosis is made out. The prescription in the folder is given to the patient in the office of the department and he goes into the treatment room and presents the prescription to the technician in charge.

On completion of the treatment, the patient returns the prescription and its folder to the desk, and the two cards are returned to the patient, one of which is punched for the treatment which was given. At the close of the day all histories which have come to the department are returned.

In the case of ward patients, when physiotherapy is desired, it is ordered directly on the sheet for doctor's orders, and the entire chart is sent to the department. The director or assistant director of the department goes to the ward and examines the case at the earliest opportunity and then makes out a prescription which is taken to the ward each time a technician gives a treatment.

Once a week when grand rounds are made by the entire attending staff, the director of the department of physiotherapy attends these rounds and explains what treatments are to be given to the patient and has an opportunity to see all dressings entirely removed and participate in the discussions with the attending surgical staff, as to the advisability or non-advisability of treating each patient. It also gives the surgical staff a chance to discuss the probable outcome of such treatments.

The Beekman Street Hospital department of physiotherapy has been self-sustaining since the beginning. This fact is mentioned because some hospitals which wish to establish a physiotherapy department fear that it will only be a means of increasing an existing deficit. A rationally directed and properly conducted physiotherapy department should be included in the service given by every modern hospital.

A SYSTEM OF PURCHASING FOR A SMALL SANATORIUM

BY ISAAC C. BREWER, M.D., SUPERINTENDENT, PLEASANT VALLEY SANATORIUM, BATH, N. Y.

THE first duty of a sanatorium is the care of the sick. This must be uppermost in the mind of the administrator at all times. The care that can be given, however, depends, in a large measure, upon the finances of the institution. Since the bulk of the money expended by an institution is for food and supplies any mismanagement of the purchasing department is quickly reflected in the care of the patient. Therefore, the purchasing department is of the greatest importance to the patients in the institution.

Administration No. 4.

PLEASANT VALLEY SANATORIUM

Date.....192...
Please furnish for *Superintendent's Office, Kitchen, Laundry, Head Nurse's Office, Cleaner, Carpenter, Janitor, Staff Home, the following:

Quantity	Articles

Signature.....

This form must be made out and brought to the head nurse before the article can be issued. *Strike out words that do not apply.

In large institutions, where all of the departments are properly organized with a competent person at the head of each, it is comparatively easy for the administrator to keep track of the purchases. But in many small institutions the purchasing department is considered of minor importance and supplies are obtained at retail price or from the first salesman who appears after the want is known. Under such circumstances, the maximum price is usually paid and, in not a few instances, prices are paid for a second rate article when first class articles could have been purchased for the same or at a smaller sum. Medical supplies have been purchased from a salesman when the same article of the

same make could have been secured from the factory at a considerable reduction.

After a number of years as superintendent of small institutions where I had not only to attend the sick personally but do the purchasing as well, I have evolved a method which is simple and satisfactory and can be operated with a minimum of labor. This may be helpful for others who are beginning the administration of a small institution.

Post Cards Used for Bids

In calling for bids, postal cards are used unless the specifications are such that a letter becomes necessary. Bids are asked f. o. b. our station and are usually so received. If the point of delivery is elsewhere we insist on knowing the weight of the goods when packed and the freight rate to our station.

On receipt, the bids are tabulated on form No. 7 which contains all the information required for a comparison of prices. Samples are requested unless the article is of standard manufacture.

When the bids are in, they are all considered and the order given to the bidder with the lowest price, provided that he is reliable and the qual-

Financial No. 6

PLEASANT VALLEY SANATORIUM BATH, NEW YORK SUPPLY COST RECORD

Material..... Description.....

Date Received	Quantity	Order No.	Purchased from	Net Unit Price	Remarks

Original

No.....
Order No. must appear on bill

ORDER BLANK PLEASANT VALLEY SANATORIUM (Steuben County Tuberculosis Hospital)

To.....

Please deliver the following by.....

Quantity	Articles	Price	Amount

Please render bill on enclosed vouchers, the original to be sworn to.Superintendent.

PLEASANT VALLEY SANATORIUM
BATH, NEW YORK

Financial No. 7

Article.....				Description.....						
Bidder	Date	Quantity	Unit Price	Gross Price	Discount	Net Price	Freight Rate	Cost Delivered		Remarks
								Bulk	Unit	

PLEASANT VALLEY SANATORIUM

Financial No. 8

Property Inventory and Record Sheet.

Folio	Date	On Hand ...	Unit Price	Value	Rec'd	Unit Price	Value	Issued	Unit Price	Value	Remain- ing	Unit Price	Value	Remarks

ity is satisfactory. Thus the lowest bidder is not always given the order.

Procedure After Order Is Placed

The order is prepared in duplicate; one copy (white) is sent to the bidder and the duplicate (pink) retained in the unfilled order file. On receipt, the goods are checked against the duplicate order and, if correct, the order goes into the filled order file. On receipt, the invoice is checked against the duplicate order and, if correct, the order is attached to it and both go to the superintendent for approval. When audited, the order is filed in the "paid order file" after receiving a number corresponding to the voucher on which the item appears. In this file the orders appear alphabetically by firms.

On receipt, the check from the auditor is entered opposite the voucher on the claims register. No book accounts are opened, but in the past five years there has been no dissatisfaction with this method of handling vouchers.

After auditing, the clerk enters on form No. 6 from the duplicate vouchers all the items purchased. This gives a continuous record of all purchases, the persons from whom the goods are obtained together with the quantity and price, and furnishes an accurate account of the total purchases each year.

On receipt, all goods are entered on form No. 8 which shows receipts and expenditures and the inventory, when taken. Thus the quantity on hand is able to be ascertained at any moment.

Form No. 4 is used when supplies are withdrawn from storage and is filed with the book-keeper as soon as the supplies are issued.

As this system necessitates the use of a clerk for about four hours daily, the person who has charge of the books, purchasing records and the other office work, may handle this work.

MEDICAL WORLD MOURNS DEATH OF DR. VON WASSERMANN

Dr. August von Wassermann who attained a place in the foremost rank of the medical profession died March 16, 1925. Through his continued studies he made several lasting contributions to medical knowledge, but perhaps is best known for his greatest discovery, the complement fixation test in syphilis which was first announced in 1906. This so-called Wassermann test is an application to syphilis of a general reaction discovered by Bordet and Gengou.

Some knowledge of the vast importance of the use of this test as an aid in the diagnosis and treatment of syphilis may be gleaned from data collected and compiled by the U. S. Public Health Service. The 165 laboratories of state health departments and state institutions scattered throughout the country administered 990,130 Wassermann tests in 1923. This figure means that these laboratories have given one Wassermann test to every 106 people in the United States.

Dr. Wassermann was born February 21, 1866 at Bamberg, Bavaria. He received a sound general and professional education and studied medicine at the Universities of Erlangen, Munich, Vienna and Strassburg, receiving his medical degree from the last named institution in 1888. He then became assistant for infectious diseases at the Koch Institute of the Charite at Berlin, gaining the title of professor in 1898. In 1901 he was given an appointment to the University of Berlin as Professor Extra-Ordinary. In 1906 he assumed the duties as head of the division for Experimental Therapy and Serum Research at the Royal Institute for Infectious Diseases at Berlin. In 1913 he added to his duties those of director of the newly founded Kaiser Wilhelm Institute at Dahlem, near Berlin, an institute of experimental therapeutics. He was also a prolific contributor to medical literature. Among his best known works are those contained in the "Handbook of Pathological Microorganisms."

OUTLINES OF A GOOD STATE HOSPITAL: PART III, FUNDAMENTALS OF PRACTICE*

BY CHARLES F. READ, M.D., STATE ALIENIST, CHICAGO, ILL.

PRESUMABLY, a well constructed group of buildings adequately planned for the care of the mentally ill and operated by a trained personnel constitutes a good state hospital. But the hospital is not complete until certain fundamental obligations have been appreciated and the duties which they imply have been adequately discharged.

These obligations together with the hospital practice which they entail may be broadly outlined as follows:

1. The obligation of society to the mental patient:
 - a. Mental hygiene programs.
 - b. Provisions for special care—state hospitals.
 - c. A tolerant, helpful attitude toward paroled and discharged patients.
2. The obligation of society to the state hospital:
 - a. Adequate building programs.
 - b. Adequate maintenance.
 - c. Intelligent provision for administrative control by way of local boards of trustees, or state boards of control and lay advisory boards—charity commissions.
3. The obligation of the hospital to society:
 - a. Judicious economy.
 - b. Good employees.
 - c. The return to their homes of the greatest possible number of recovered patients.
 - d. Care in the parole of unrecovered patients, and in their subsequent supervision.
 - e. Assistance in mental hygiene programs.
 - f. Research and educational work.
4. The obligation of the hospital to the patient:
 - a. Modern methods of care.
 - b. Intelligent treatment.
 - c. Adequate equipment.
 - d. Parole and discharge as soon as conditions permit.
 - e. Considerate treatment of relatives.
5. The obligation of the hospital to the employees:
 - a. Adequate quarters and compensation.
 - b. Good food well cooked.
 - c. Training.
 - d. Fair play.

Adequate Housing First Requisite

The first requisite for satisfactory state hospital management is a sufficient number of well-planned buildings in which patients may be properly separated into small groups.¹ Improvement and recovery are seriously interfered with by overcrowding and poor classification. Yearly appropriations for maintenance must be adequate or much that should be accomplished will be left undone. Per capita costs vary widely in the United

States; in Illinois last year they ranged from \$216 to \$325. Manhattan State Hospital, Wards Island, N. Y., with over 6,000 patients reported a rate of \$278 for 1922-1923. Under ordinary conditions a maximum of \$325 should suffice to carry on the work of a hospital such as we are outlining—one of 3,000 patients with an annual admission rate of eight hundred.

After the state has founded a hospital, it must, in various ways, retain a general control of its administration. The question of local boards of trustees, versus state boards of control has been touched upon in a previous article.² Centralized control is in favor at present and will probably continue to be, especially in states having a number of hospitals. The results seem to be a desirable standardization of practice, together with economy in buying, and, upon the whole, the assurance of good employees.

Lay Visiting Boards Desirable

Aside from official supervision, however, it seems wise for the public to establish a close contact with hospital administration by way of lay visiting boards. The charity commissions of a number of states reflect this very proper desire to obtain information and to exercise recommendatory powers, independent of the central administrative board. It is a wholesome check upon partisan control of official supervision for a non-partisan and unsalaried commission to be able to investigate hospital conditions and to go to the management with criticism, commendation and advice, or to go to the people with a statement of conditions and needs. Local boards of visitors may also be of service, though there is a grave possibility of their becoming so well satisfied with the local institution that their visits deteriorate into a mere ritual of approbation.

Practice of Economy a Duty

The obligation of the hospital to the public which has created it implies the discharge of a number of specific duties, the first of which is, obviously, the practice of judicious economy. As public funds must be economically spent a central board of control can be of decided assistance in this matter even at the risk of its adopting restricted policies at times. Since the bulk of the appropriation for operation goes for the staples,

*This is the third and last of a series of articles on the state hospital, prepared for THE MODERN HOSPITAL by Dr. Read.

1. See part I of this series—MODERN HOSPITAL, March, 1925.

2. See part II of this series—MODERN HOSPITAL, April, 1925.

coal, food and clothing, the wise purchase and use of these commodities are vital to good hospital practice and are, in the last analysis, a factor in the care of the patient.

Obligation of Hospital Employees

Expenditure of the salary fund involves careful consideration of the number and quality of the employees in the various departments. Too often poor employees are kept on the pay roll because the superintendent is too "charitable" to let them go. But it should be remembered that charity in state hospital practice should always begin with the patient. There should be a pension fund for employees who have outlived their usefulness in the state service; to carry them along at the expense of the patients' welfare is bad practice. Many other ways in which the salary fund can be abused might be mentioned. For example, it is easy to permit a department such as the farm or the laundry, to absorb more than its proper share of this appropriation. Good management, therefore, consists in a careful determination of the number of employees necessary to carry on the work of each department, checking this at frequent intervals against those actually employed.

The obligation of the hospital to its employees involves adequate quarters, reasonable pay, and good food, well cooked. Few employees can be expected to render service out of proportion to the consideration shown them in these respects. Special courses of training must be given for attendants as well as nurses, leading to certificates or diplomas. There must be fair play for all. Favoritism and espionage, next to actual brutality, are most demoralizing in their effect upon care and treatment.

Just as it is the obligation of society to keep as many of its members as possible out of a state hospital, so it is the duty of the hospital to assist in this preventive work by way of cooperation in community mental hygiene programs, and by careful supervision of patients who have been returned to their homes. The time is past when the management of a state hospital can remain content with affairs of intramural care and treatment. The superintendent and his staff, including the social service department, must help in bringing to the public a realization of mental health problems, and assist in dealing with them by way of lectures and clinics both in and outside the hospital. Society naturally expects the hospital to salvage as many useful individuals as possible, from patients committed to the institution. Good hospital practice will recognize this duty and seek to return wage earners and house-

wives to the community as rapidly as possible. The obligation of the hospital to the patient and his relatives along these lines is less impersonal, a matter of humanity rather than of dollars and cents. Thus an idle son sitting in the kitchen corner, though no asset to society, is a comfort to his widowed mother. Paroles and discharges cannot be limited merely to recovered patients and those who may be socially useful, even though not fully recovered.

With few exceptions, mental cases cannot be cured in the sense of being actually healed by medical management, but many can be assisted to recovery by modern methods of care and treatment. Many times, even when a patient's condition is such as to make recovery practically impossible, improvement may be brought about by judicious care. Today enlightened state hospital practice implies quite different methods of care and treatment from those of even ten years ago. The day when the patient had to sit hour after hour in his chair, restrained by straps or by the orders of his attendants, has passed. Now in a good hospital the patients' daily life is made to approximate as nearly as possible that spent in a simple community. In the state of Illinois, mechanical restraint, together with the seclusion of patients in single rooms, was done away with years ago, and freedom of the grounds extended to as many as possible, even at the cost of occasional escapes. Unfortunately, certain newspapers, in their search for sensation, often lose sight of what the community owes to the hospital, which it has established, in the way of co-operation in this program of freedom by taking a tolerant view of the occasional misbehavior of escaped patients.

Along other lines also time has brought improvement. Occupation, in addition to that involved in the regular industries of the hospitals, has become recognized as good treatment to such an extent that in the state of Illinois alone some 7,000 mental patients were treated last year by being taught to work with their hands. During the last five years this re-education of apathetic, delusional patients has become a necessity of good state hospital practice. Entertainments for patients are nothing new, but training, in the form of gymnasium work, group calisthenics and organized out-of-door pastimes, are a recent departure in which the patient actually does something for himself instead of having it done for him.

Hydrotherapy has been practiced more or less indifferently for many years. The better hospitals treat intensively all acutely disturbed patients in wards set apart for this purpose where baths and

packs, rather than morphine and bromides, may be given as required throughout the twenty-four hours.

As twelve per cent of the 60,000 to 70,000 mental patients who yearly enter a hospital for the time are infected with syphilis, good practice demands that these patients shall have the benefit of the most recent methods of treatment. Operative work must be upon as high a level and as thoroughly carried out as with the mentally well. In Illinois, a state surgeon is employed to devote his entire time and skill to this end. Mental patients do not cooperate well in physical examinations and the diagnosis of disease is often exceedingly difficult, hence the best of scientific equipment for diagnosis, as well as for treatment, must be placed at the command of the medical staff, along with the advice of attending and consulting staffs. Laboratories for research and clinical study competently manned, the opportunity for investigation and research may be looked upon as vital factors in good hospital practice, along with the humane desire to heal and to alleviate suffering—the primary purpose of every hospital.

It is hardly necessary to emphasize the humanitarian side of hospital practice, which has to do not only with physical relationships, but with the mental and spiritual environment of the patient as well. Actual brutality is rare nowadays, but an all-pervading spirit of kindness is perhaps not so common as it might be. The friends and relatives of patients will judge a hospital by the presence or absence of this spirit of service no matter what the physical efficiency and scientific attainments may be.

Consideration for the sacredness of human relationships as well as the necessity of making room for new admissions must determine a liberal policy with reference to the parole of those patients who have sufficiently improved to return home without danger to their fellowmen. Even in the case of those who are essentially unchanged, home conditions may be capable of such improvement that the patient will be better off there than in the hospital. Occasionally the mere return to an environment other than the home will be sufficient to warrant another trial in the community. A good hospital will not practice extreme conservatism with regard to these matters merely to escape the possibilities of newspaper notoriety, and an enlightened public will appreciate this attitude. The more attention a hospital superintendent gives to the proper sort of publicity in these matters and to safeguarding society by social service supervision of the patient during the probationary period, the more sympathetic will

become the attitude of the public. Even charitable organizations and the relatives of the patient must be taught to deal patiently with the mental case in the home, and to assist in his adjustment there. Employers as a rule are quite ready, even anxious, to return a patient to his work, if assured that it is safe to give him a trial. Large corporations can perhaps be induced to specialize in jobs for the mentally handicapped. General hospitals can make good use of female parole patients as domestics. The newspapers can deal fairly with the infrequent misdeeds of paroled patients if they but will. It is a function of hospital practice to secure the assistance of the press in this regard, though this is a difficult task which depends a great deal upon the personal contact of the management with those who control editorial policies.

Not all paroled patients make good in the community. Many must be returned to the hospital but thousands remain, thus making room for those whose need is greater. The process is an interminable one. Only good hospital practice can bring order and health, or at least some degree of mental comfort, to the lives of these distraught refugees from the battle of life. We have considered here only the fundamentals of their care and treatment; the details of the ways and means by which these may be realized, the every day practical problems of physical upkeep, ward management, farm management, etc., are too much a matter of personal opinion and experience for attention here. If there is an intelligent sense of service the details will take care of themselves. If the desire to discharge an obligation toward the community, the patient and the employee is directed by an appreciation of what this service implies, good practice will be added to good buildings and good employees, to make a good state hospital.

OHIO ASSOCIATION PLANS ELEVENTH ANNUAL MEETING

The eleventh annual meeting of the Ohio Hospital Association will be held at Columbus, June 2, 3, and 4. The program has not yet been definitely arranged but tentative plans have been made to have Dr. Martin Fisher, Cincinnati, as the principal speaker at the annual dinner which will probably be held at Hotel Deshler, the opening day of the convention.

Dr. William H. Walsh, executive secretary, American Hospital Association will also be on the program. Dr. R. G. Schwartz, Cincinnati General Hospital, will read a paper before the general session on Wednesday on the subject of "Heliotherapy."

The Ohio Sanatorium Association will also meet in conjunction with the association, and one joint session will be held with the Ohio Dietetic Association. Plans are being made for an extensive exhibit of hospital equipment and supplies to be held at Memorial Hall.

THE SAMUEL GUSTINE THOMPSON ANNEX, JEFFERSON HOSPITAL, PHILADELPHIA, PA.

By H. K. MOHLER, M.D., MEDICAL DIRECTOR, JEFFERSON HOSPITAL, PHILADELPHIA, PA.

THE new building of the Jefferson Hospital group, which increases the total bed capacity of the institution to 612, including forty-eight cribs, is adjacent to and connects with the general hospital building. It is seventeen stories high, composed of steel frame, concrete arch floors, brick exterior walls, steel window sashes with wire glass throughout.

This building cares for the private, ward and out-patient service of the hospital. The upper floors are utilized for private patients; the lower floors for wards; part of the second, first and the entire basement being used for out-patient departments, supplementing the out-patient departments in the general hospital building.

The area covered by the building is approximately 108 feet by 108 feet. Three elevators serve the building, each one large enough to carry a bed—two designed as passenger elevators and one as a service elevator. The high speed passenger elevators have a self-leveling device, assuring a positive floor level. Three high speed electric dumb elevators pass through all the diet kitchens on the various floors and one goes to the store room in the basement.

The sixteenth floor is devoted to laboratories, which surmount the enclosed portion of the roof garden. Here is provided an abundance of light and ventilation, with

ample room to conduct the clinical and research work of the hospital.

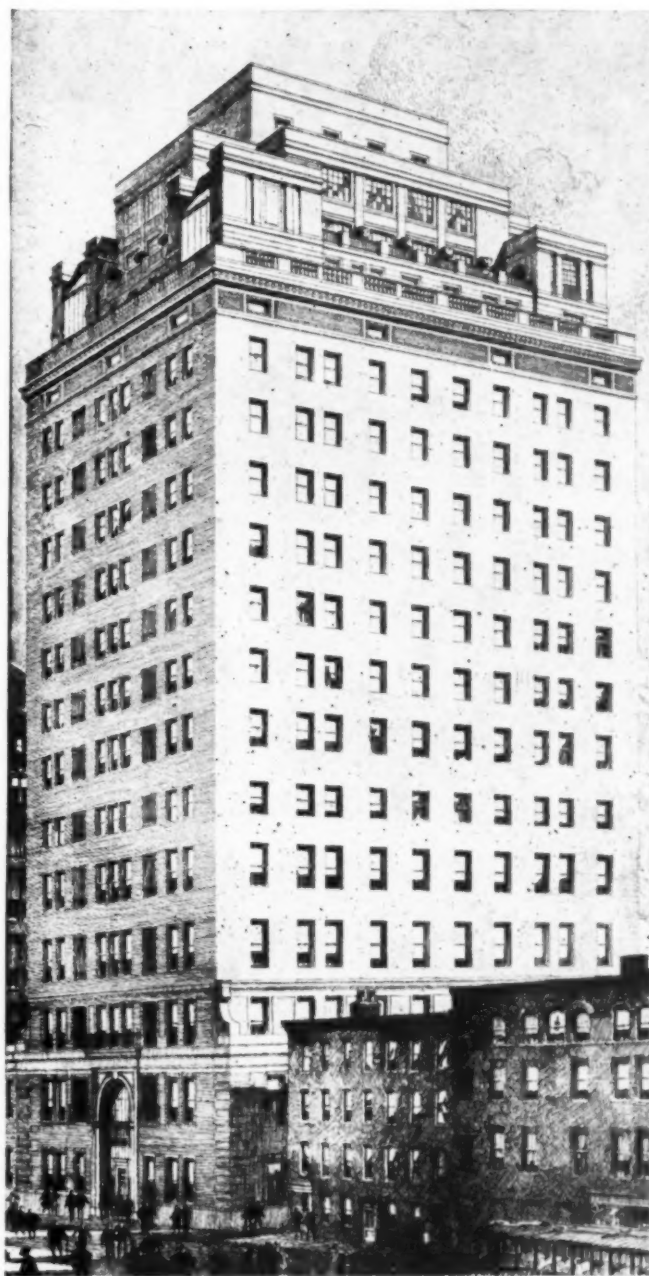
On the north side of the fifteenth floor are located the laboratory and office of the director of the laboratories. On the east and west sides are open and enclosed roof gardens, which can be used in inclement weather, and on the south side are two solariums and the library.

The fourteenth floor has a maternity delivery room suite, consisting of nurses' work-room and two delivery rooms. On the north and east sides of the building are located three operating rooms, three anesthetizing rooms, a nurses' work-room, surgeons' and nurses' scrub-up rooms and a sterilizing room. Two of the operating rooms are circular, eighteen feet in diameter, and one operating room is rectangular, eleven feet by sixteen feet.

Private room floors extend from the eighth to the thirteenth, inclusive, and are typical in design. Three types of private rooms have been created; corner rooms, containing two windows, with private bath; inside rooms, each with bath and lavatory facilities; inside rooms with lavatory facilities and use of the bath which is placed between two adjacent

rooms. These three types serve all needs.

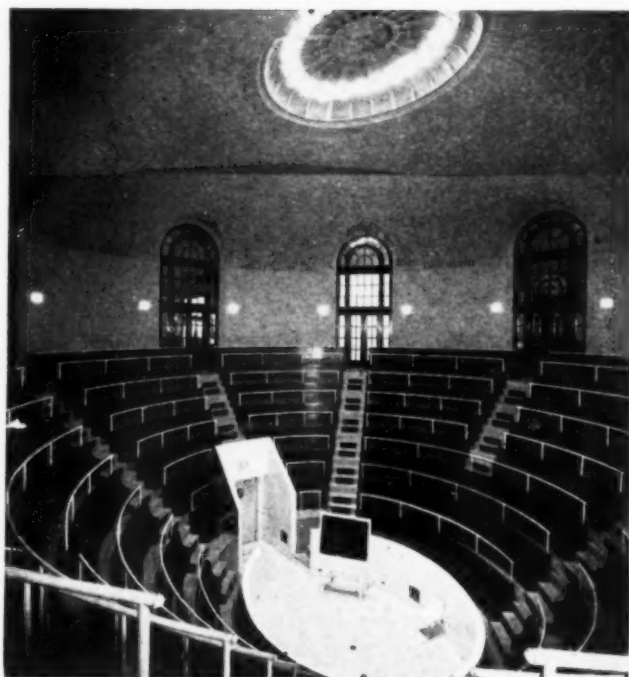
On each floor the head nurse's office is in the center of the floor and controls the exit from



The new Samuel Gustine Thompson Annex of the Jefferson Hospital, Philadelphia, Pa.



(Upper left) information desk and lobby; (upper right) section of reading room and library on fifteenth floor; (center left) pupil nurses' laboratory and diet laboratory combined; (center right) meal hour in the nurses' cafeteria looking west on the seventh floor; (lower left) one of the delivery rooms in the maternity department on third floor; (lower right) section of main kitchen on seventh floor.



Clinical amphitheater.

the stair landing and the elevators.

The utility room and service kitchen of each floor are on the north side of the building.

The inside rooms contain oriental rugs, mahogany furniture which is wooden excepting the bed which is metal and is of an adjustable type spring that can be raised or lowered in sections. Corner rooms have mahogany furniture, finished in colors, with metal bed to match. The seventh floor of the building is devoted entirely to private patients' main kitchen, nurses' cafeteria for pupil nurses, in both hospital buildings, and a special diet kitchen.

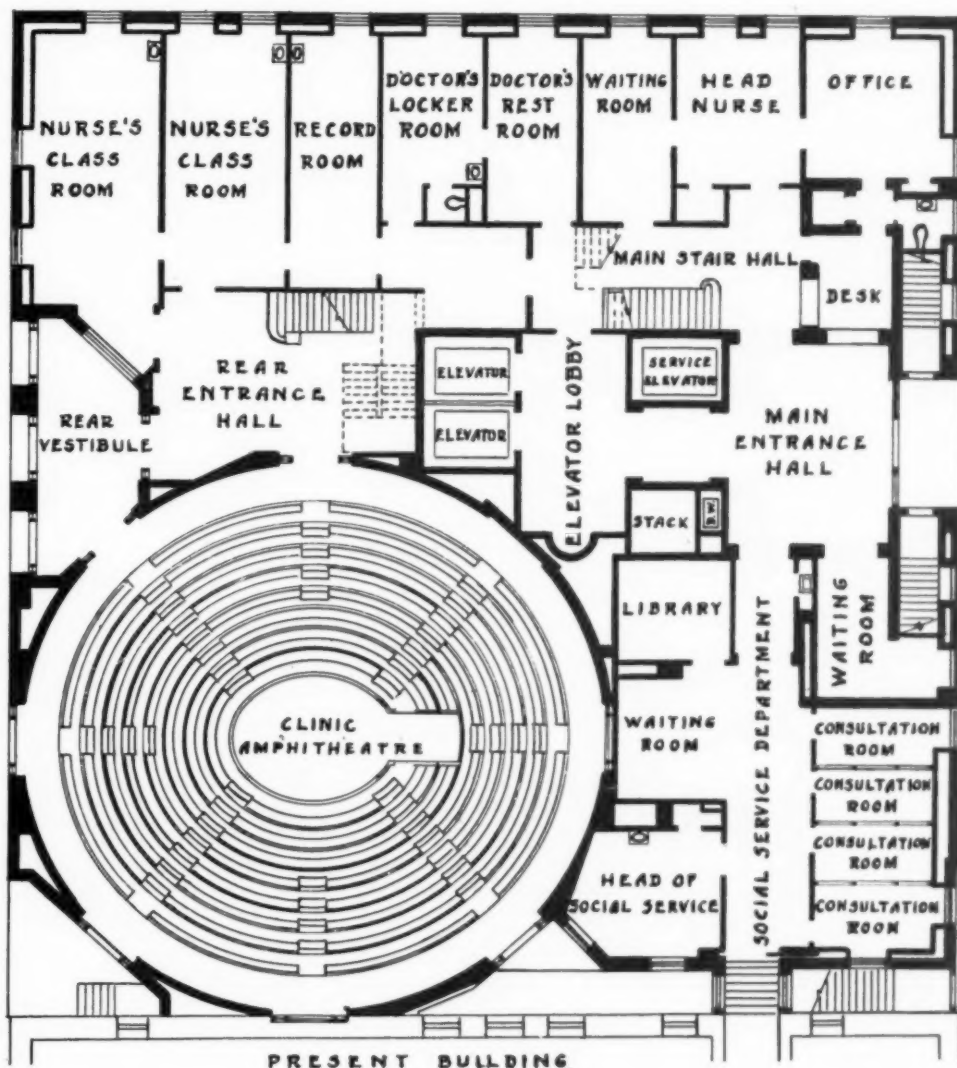
The fourth, fifth and sixth floors remain unfinished, as it is proposed in the near future to equip these floors as wards, laboratories and research departments.

A maternity department, located on the

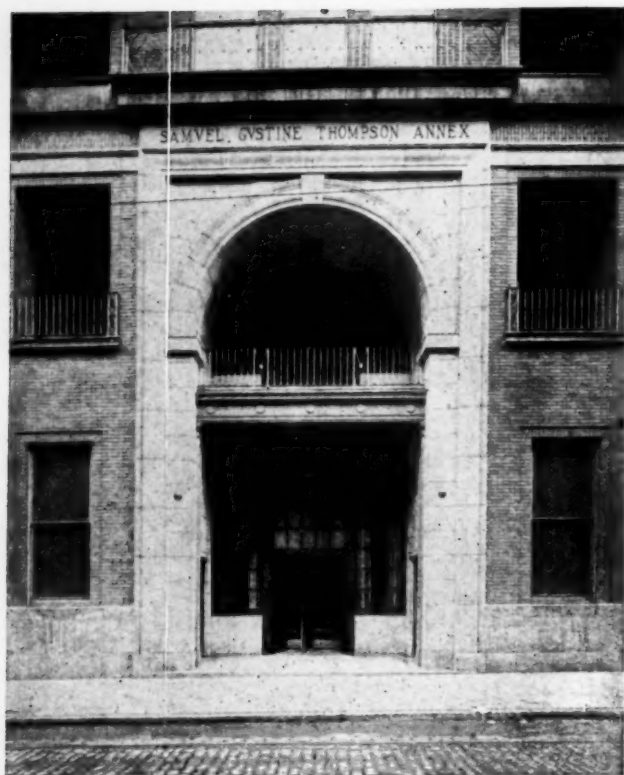
third floor, is a complete unit of five small wards containing six beds each and two wards containing two beds each—a total capacity of thirty-four beds. A nursery, two delivery rooms, and a class room are also on this floor. One of the two-bed wards has its own lavatory facilities and sterilizers, and is intended as an isolation unit.

The second floor contains an x-ray department, with many special construction features in the nineteen rooms, such as lead lining underneath the wooden floors, likewise one-sixteenth inch lead linings in back of plaster walls. The doors are likewise lead-lined. Where glass is used between the rooms, special so-called lead-glass is installed, which performs the same function as one-fourth inch sheet lead.

The bronchoscopic department, consisting of a treatment room, three examination rooms, waiting room and office room, is also located on this floor. The balance of the floor is devoted to the dental department, which has two operating units complete, a laboratory, and waiting room. The



First floor plan.



Sansom street entrance to the new Samuel Gustine Thompson Annex.

first floor of the hospital has the entrance lobby, which is off Sansom street, information desk, social service department for the entire hospital, the director of nurse's office, the staff room, a waiting room for patients and two nurses' class rooms and bookkeeper's department.

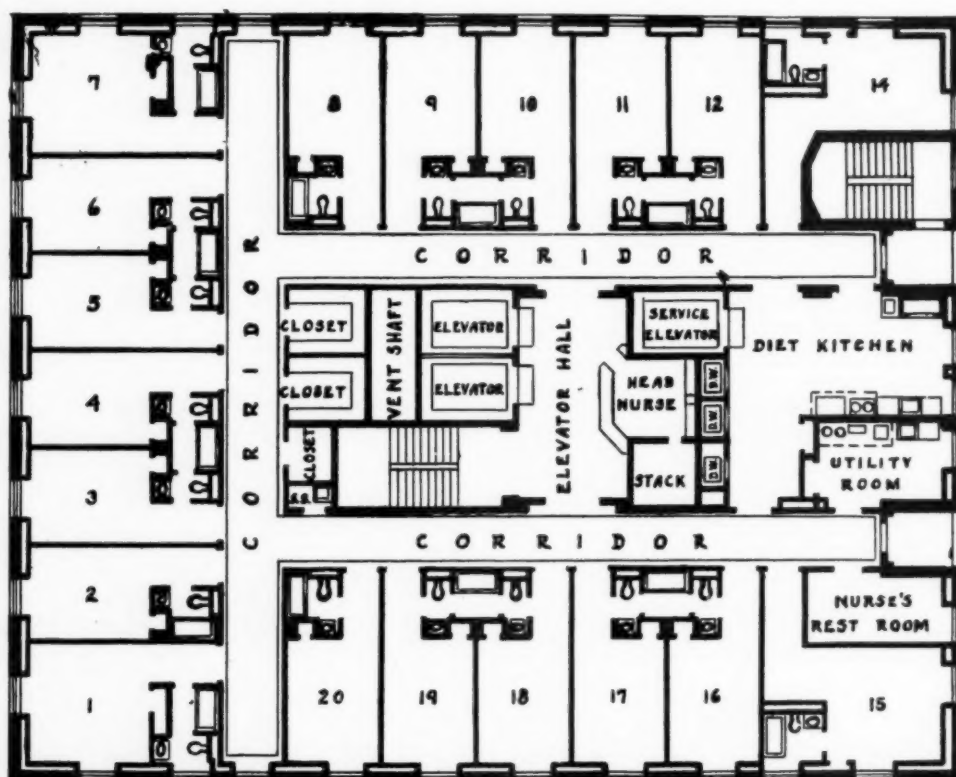
On this floor, on Moravian street, is the student entrance to the clinical amphitheater, which is oval in shape, with a seating capacity of 550, extending from the basement to directly beneath the third floor, approximately forty feet. The north and south dimensions are sixty-five feet, the east are sixty feet and the west sixty-five feet. Thus the medical students enter from the street level, as the floor of the amphitheater is approximately seventeen feet below the street grade.

The interior of the amphitheater is of concrete structure, cement fin-



One of the round operating rooms on the fourteenth floor with arch glass ceiling behind which is concealed its lighting system.

ished floors, with oak seats and plaster walls, sixteen feet high. The ceiling is of the accoustical tile type, supported by steel frame, with special sky-light directly in the center of the room, housing twenty-four 200 watt lamps, arranged in a circle, and so focused that the field of the sur-



Typical floor plan.

gical operation, forty feet below, is well illuminated. The lamps are located behind the glass sky-lights.

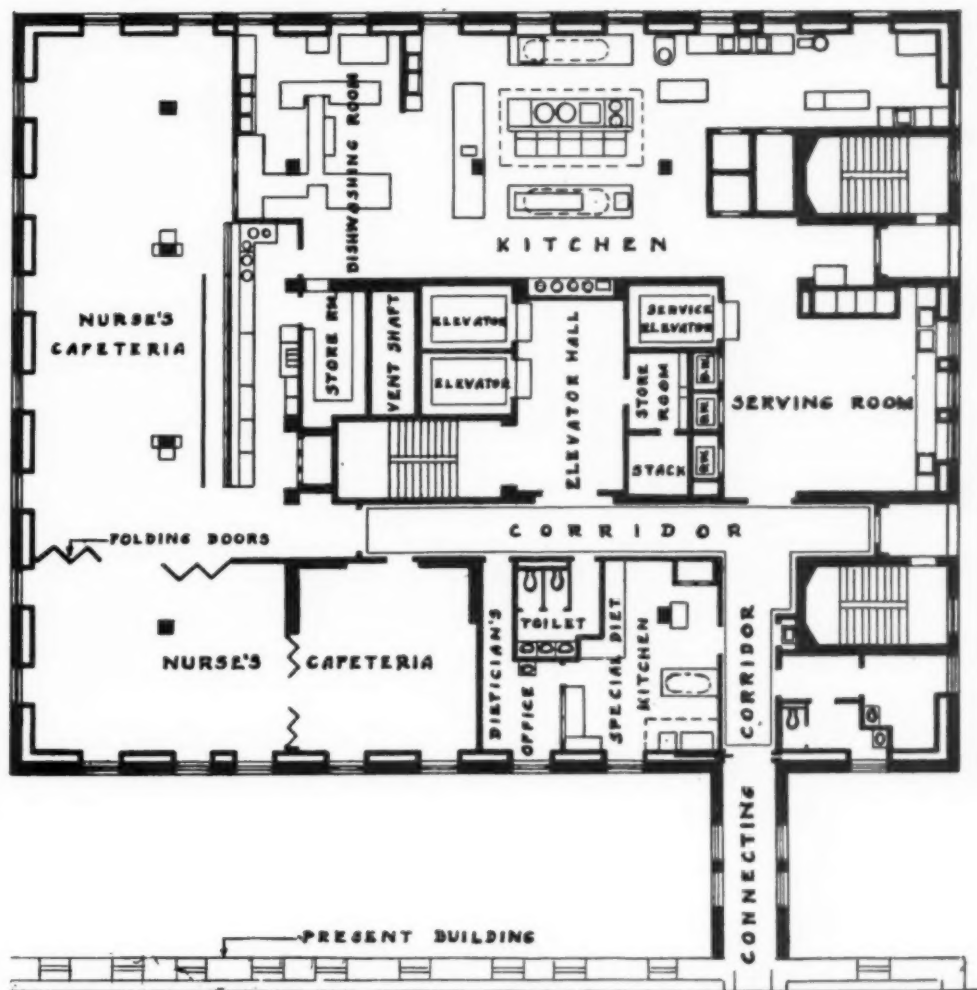
The basement houses the out-patient departments of clinical medicine, orthopedic diseases, gastro-enterological diseases, children's department and the radium department. The sub-basement is used entirely for storerooms and for a fan room for housing the ventilating equipment for the amphitheatre. Mechanical devices, other than those described here, are located in the basement of the old hospital building, which is adjacent.

The woodwork of the building is of the so-called hospital type, with round corners and coves. For the purpose of keeping furniture from marring the wall, the base in each private room extends four inches from the wall and six inches high in the form of a triangle.

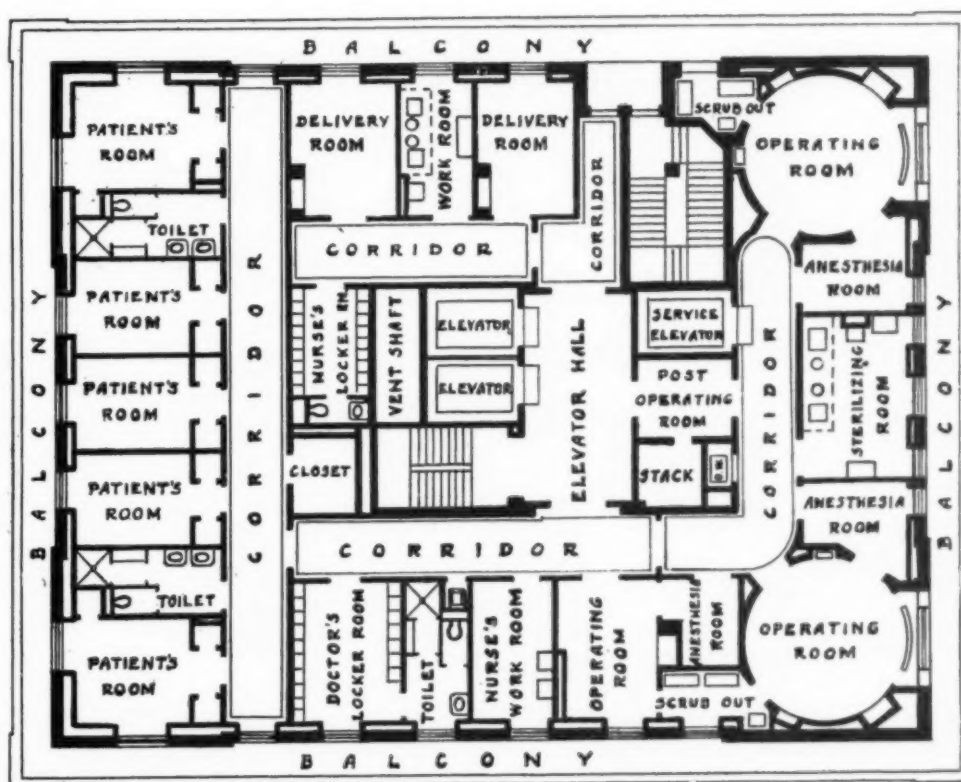
Metal door frames are used throughout the entire building. The main corridor is six feet wide and has a four-foot strip of rubber flooring (black and white pattern) between and flush with the base. The doors are of wood, four by seven feet, to permit a bed to be wheeled through them.

The usual nurses' call system is installed, consisting of a light over the patients' door which registers at the head nurse's office, the utility room and the kitchen.

Toilets and bathrooms, with the exception of those connected with



Seventh floor plan.



Fourteenth floor plan, Jefferson Hospital.



Examining cubicles of the bronchoscopic department.

corner rooms, are all interior and are ventilated by means of fans in the loft floor. All hot water pipes are brass. The wash basins, toilets, and



View of corner private room.

sterilizers are fastened to side walls, and do not touch the floor.

The following members of the building com-



A corner of the metabolic and special diet kitchen.

mittee were instrumental in making possible the new addition: Hon. William Potter, president, board of trustees; Mr. Alba B. Johnson, chairman, hospital committee; Mr. Samuel M. Curwen, chairman, finance committee; and Mr. Robert P. Hooper, chairman, property and insurance committee.

ANNUAL MEETING RECORDS PROGRESS IN CONTROL OF CANCER

That progress is being made throughout the United States in the control of cancer, largely due to the efforts of the American Society for the Control of Cancer, was shown in the reports and discussions of that body at its annual meeting held at the headquarters in New York City, March 7, 1925.

In the annual report of Dr. George A. Soper, managing director, evidence was presented to show that the efforts of the society to acquaint the public with the early symptoms of cancer in order that those who are affected may receive speedy treatment had borne fruit throughout the country.

The latest report of the Pennsylvania Cancer Commission showed that in Pennsylvania from 1910 to 1923, the average time between the first symptoms and operation in superficial cancer cases had dropped from eighteen months to fourteen and six-tenths months, and that the average time between which a patient consulted a physician and was operated on dropped from thirteen months to four and five-tenths months. Where deep cancers were concerned, the results were even more striking. Twelve years of educational work had cut down the average time between the discovery of the first symptoms of superficial cancer and the first call on the doctor of 20 per cent, and reduced the interval between the patients' first appearance at the doctor's and the beginning of medical treatment 65 per cent in superficial cancer and 70 per cent in deep-seated cancer.

The society's efforts for the year had included systematic work among the public, members of the medical profession, nurses, dentists and students in medical colleges. The society's publications had all been revised to contain the latest information. Exhibits had been made at many notable meetings of professional men and women.

With reference to clinics, the cornerstone of a permanent institution had been laid in connection with the medical school of the University of Minnesota, the funds having been provided by Mrs. George Chase Christian, a member of one of the society's committees. A temporary clinic had been successfully operated at Fall River, Mass., under the direction of Dr. E. P. Truesdale of that city, aided by Dr. Francis Carter Wood.

In cooperation with the Connecticut Medical Society, the Connecticut Public Health Association and the Connecticut State Department of Health, the society had begun a three years' campaign in Connecticut during which it will turn to account the experience it has gained elsewhere in cancer control.

Dr. Howard Canning Taylor, professor of clinical gynecology at the College of Physicians and Surgeons, and president of the American Gynecological Society, was elected president of the society. Dr. Taylor, who has been the society's vice-president and chairman of its executive committee, succeeds Dr. Charles A. Powers, deceased. Thomas M. Debevoise was re-elected secretary and Calvert Brewer was again elected treasurer. Dr. Francis Carter Wood was elected vice-president.

AN ANALYSIS OF SURGICAL SUPERVISORS' EARNINGS

BY JOSEPH J. WEBER, M.A., EDITOR, THE MODERN HOSPITAL, CHICAGO, ILL.

WHAT is considered an average salary for a surgical supervisor and how close does a rough estimate come to the actual figures? In an attempt to gain data which would throw some light on the foregoing question and which would secure information of value to the hospital field, THE MODERN HOSPITAL, during February, 1925, sent out a questionnaire to groups of hospitals scattered throughout the United States and Canada.

The hospitals were selected at random and because of this method of choice the averages secured and the conclusions arrived at show the true trend of salaries and maintenance, rather than the biased view which would be gained through the use of a "seeded" list of institutions with the resulting figures and percentages.

One thousand questionnaires, requesting data on the surgical supervisor's salary and maintenance, were sent to two groups of hospitals those having less than 100 beds and those having 100 or more beds.

In the first group replies were received from 21.2 per cent, or 106 institutions, while in the second group 198 responses were returned. This was 39.6 per cent of the number of questionnaires mailed.

Discloses Average Amount Paid

A surgical supervisor, on the average salary, would receive \$1,383.71 annually. It is interesting to note that the supervisors receiving more than this amount are fewer than the number under this average. This may be explained by the fact that a few of the larger institutions pay their supervisors much above the usual run of salaries.

In the first group, composed of hospitals having less than 100 beds, an average salary of \$1,311.84 per annum is received. In hospitals having 100 or more beds the average is \$1,444.63.

Putting the first group into sub-divisions according to bed capacity, there is no gradual increase in salary in proportion to the increase in the number of beds in the hospital. Thirty-seven hospitals, ranging from 10 to 45 beds, pay salaries which average \$1,322.16, while the next group, consisting of thirty-seven larger institutions having between 50 and 74 beds, drop to \$1,284.48. Another fluctuation is noted when the institutions having from 75 to 99 beds are considered. Here the average rises to \$1,337.50 for thirty-two hospitals.

With the exceptions of slight deviations in the

groups having from 300 to 399 beds and 500 or more beds, the increase mounts until it reaches the high point of \$1,644.00, which is the average paid to supervisors in institutions having from 400 to 499 beds.

Maintenance shows a much more varied trend. In some cases no maintenance is offered, and in others the amount allowed for board, lodging and laundry is many times that of the salary paid. In those institutions where maintenance is allowed, the estimated yearly cost to the hospital runs from \$240 to \$1,200. The former figure appears frequently in the questionnaires, while \$1,200 is paid in only one instance, that of a 100 bed hospital. Listed separately from the amount for maintenance, but which might well be included, is a residence for this surgical supervisor.

As a yearly cost to the institution, maintenance shows an average figure of \$526.64. Among the groups of smaller hospitals the estimated average is \$500.91 per annum and in the larger institutions \$552.37 per annum.

The questionnaires disclose a wide difference in the annual amounts received by surgical supervisors. The lowest figure, that given by a hospital of 140 beds, is \$600 a year with \$480 estimated maintenance. At the opposite end of the list is a surgical supervisor in a 925 bed institution receiving \$3,000 annual salary with \$1,000 for maintenance.

The variance in the salaries paid and the maintenance allowed surgical supervisors is, to some extent, due to the varied types of institutions considered. In municipal, state, county and federal institutions the salaries received, maintenance allowed and increases given follow a somewhat definite scale, while most of the private and public hospitals are not tied down by such stringent regulations.

Among the hospitals where salary increases have been received, \$12.85 a month has been the average increase. But many of the institutions have not offered increases in four or five years, while others have not been in operation long enough to warrant an advance in salary. In the smaller hospitals, the most general increases were five and ten dollars a month. Greater increases among the larger institutions brought up the average to its present figure.

The following tabulations comprise the statistical information from which the foregoing conclusions have been drawn:

DETAILED INFORMATION REGARDING SALARIES PAID SURGICAL SUPERVISORS IN HOSPITALS HAVING LESS THAN 100 BEDS

Range of Bed Capacity of 106 Hospitals—10 to 98 Beds.

1 to 49 Beds

* Thirty-seven hospitals, or 35 per cent, of 106 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,322.16
Average maintenance of surgical supervisor.....	484.80
Minimum salary	900.00
Maximum salary	2,400.00
Salaries above average	11
Salaries below average	26

50 to 74 Beds

Thirty-seven Hospitals, or 35 per cent, of 106 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,284.48
Average maintenance of surgical supervisor.....	499.52
Minimum salary	840.00
Maximum salary	2,400.00
Salaries above average	14
Salaries below average	23

75 to 99 Beds

* Thirty-two Hospitals, or 30 per cent, of 106 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,337.50
Average maintenance of surgical supervisor.....	575.39
Minimum salary	1,020.00
Maximum salary	3,000.00
Salaries above average	10
Salaries below average	22

DETAILED INFORMATION REGARDING SALARIES PAID SURGICAL SUPERVISORS IN HOSPITALS HAVING 100 OR MORE BEDS

Range of Bed Capacity of 198 Hospitals—100 to 2,500 Beds.

100 to 199 Beds

One hundred and fifty-two Hospitals, or 76½ per cent, of 198 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,379.46
Average maintenance of surgical supervisor.....	526.52
Minimum salary	600.00
Maximum salary	2,500.00
Salaries above average	72
Salaries below average	80

200 to 299 Beds

Twenty-eight Hospitals, or 14¼ per cent, of 198 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,463.92
Average maintenance of surgical supervisor.....	544.23
Minimum salary	1,080.00
Maximum salary	1,860.00
Salaries above average	18
Salaries below average	10

300 to 399 Beds

Five Hospitals, or 2½ per cent, of 198 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,416.00
Average maintenance of surgical supervisor.....	516.00
Minimum salary	1,200.00
Maximum salary	1,980.00
Salaries above average	2
Salaries below average	3

400 to 499 Beds

Five Hospitals, or 2½ per cent, of 198 Hospitals under consideration.

Average salary of surgical supervisor.....	\$1,644.00
Average maintenance of surgical supervisor.....	500.00
Minimum salary	1,380.00
Maximum salary	1,800.00
Salaries above average	3
Salaries below average	2

500 or More Beds

Seven Hospitals, or 4 per cent, of 198 hospitals under consideration.

Average salary of surgical supervisor.....	\$1,443.00
Average maintenance of surgical supervisor.....	537.86
Minimum salary	1,260.00
Maximum salary	1,750.00
Salaries above average	3
Salaries below average	4

Salaries of Surgical Supervisors in 106 Hospitals Having Less Than 100 Beds.

1 to 49 Bed Group

Number of Beds	Monetary Salary	Monetary Equivalent, Maintenance
10	\$1,620	Not estimated
10	1,200	300
13	1,500	720
21	1,560	300
21	1,200	425
23	1,200	360
25	1,200	Not estimated
25	1,200	400
25	1,200	480
27	1,320	500
31	1,200	600
34	1,500	360

Number of Beds	Monetary Salary	Monetary Equivalent, Maintenance
35	1,500	420
35	1,200	Not estimated
35	1,200	Not estimated
35	1,080	840
35	900	300
35	1,200	600
35	1,800	Not estimated
35	1,200	700
35	1,020	500
36	1,080	Not estimated
37	1,500	480
40	1,200	Not estimated
40	1,500	500
40	1,200	690
40	2,400	Not estimated
40	1,320	385
43	1,200	400
43	1,200	650
44	1,200	365
45	1,320	365
45	1,500	480
45	1,200	Not estimated

50 to 74 Bed Group

50	\$1,320	Not estimated
50	1,200	\$360
50	1,020	Not estimated
50	1,200	Not estimated
50	1,500	Not estimated
50	1,400	360
50	1,080	Not estimated
50	1,200	480
50	1,140	600
50	1,200	Not estimated
50	2,400	Not estimated
50	1,500	520
50	1,200	Not estimated
50	1,200	900
50	1,320	Not estimated
50	1,080	480
52	\$1,320	\$480
53	1,200	400
55	1,200	360
60	840	240
60	1,800	480
60	1,500	600
60	1,456	Not estimated
60	1,200	300
60	1,200	400
60	1,200	500
60	1,500	Not estimated
62	1,080	Not estimated
62	1,350	468.50
63	1,500	350
65	1,200	Not estimated
65	1,200	900
65	1,320	415
65	900	480
68	1,200	936
70	1,200	480
72	1,200	Not estimated

75 to 99 Bed Group

75	\$1,020	\$480
75	1,320	500
75	1,200	600
75	3,000	1,000
75	1,260	488
75	1,200	416.50
75	1,440	780
75	1,440	Not estimated
75	1,200	Not estimated
75	1,320	Not estimated
75	1,200	300
75	1,500	660
75	1,200	904.30
75	1,200	600
78	1,020	520
80	1,080	Not estimated
80	1,200	500
80	1,200	800
83	1,320	500
83	1,140	Not estimated
85	1,380	600
85	1,200	768
85	1,200	500
85	1,320	600
85	1,200	364
85	1,260	Not estimated
90	1,980	400
90	1,380	500
94	1,200	480
95	1,380	600
96	1,350	550
98	1,500	550

100 to 199 Bed Group

100	\$1,380	Not estimated
100	1,320	\$720
100	1,140	500
100	1,200	500
100	1,080	500
100	2,400	400
100	1,200	365
100	1,500	325
100	1,500	500
100	1,800	480
100	1,380	480
100	1,560	547.50
100	1,200	540

	Number of Beds	Monetary Salary	Monetary Equivalent, Maintenance	Number of Beds	Monetary Salary	Monetary Equivalent, Maintenance
	100	1,267.50	360	165	1,380	900
	100	1,440	500	165	1,380	720
	100	1,200	350	170	2,100	360
	100	1,500	500	170	1,500	360
	100	1,020	240	170	1,680	647.40
	100	1,440	720	171	1,500	920
	100	1,500	360	175	1,320	600
	100	1,320	624	175	1,200	486
	100	1,500	Not estimated	175	1,620	400
	100	1,320	500	175	1,200	800
	100	2,100	1,200	175	2,500	600
	100	1,440	Not estimated	175	960	288
	100	1,200	500	175	1,320	480
	100	1,200	785	175	1,200	500
	100	1,200	180	175	1,200	372
	100	1,080	500	175	1,200	800
	100	1,200	480	175	1,500	1,000
	100	1,200	Not estimated	175	1,320	600
	100	1,380	750	180	1,200	Not estimated
	100	1,320	600	180	1,500	600
	100	1,320	400	184	1,500	300
	100	1,200	Not estimated	185	1,800	360
	100	1,260	Not estimated	185	1,320	576
	100	1,320	540	186	1,200	420
	101	1,500	Not estimated	190	1,200	365
	104	1,080	500	192	2,100	Not estimated
	105	1,320	Not estimated	195	1,200	1,000
	107	1,200	480			
	107	1,800	Not estimated			
	108	1,200	780			
	108	1,200	600	200	\$1,320	\$520
	108	1,200	720	200	1,380	330
	110	1,500	600	200	1,080	500
	110	1,500	480	200	1,500	500
	110	1,200	680	200	1,320	400
	110	1,620	Not estimated	202	1,200	720
	110	1,080	Not estimated	204	1,500	Not estimated
	110	2,400	500	208	1,560	900
	110	1,800	Not estimated	208	1,500	Not estimated
	110	\$1,500	\$600	210	\$1,440	\$600
	110	1,380	600	210	1,200	Not estimated
	110	1,620	600	210	1,680	480
	110	1,200	300	225	1,500	600
	110	1,200	240	225	1,500	600
	110	1,320	355.50	235	1,680	Not estimated
	110	1,920	450	246	1,800	780
	110	1,140	Not estimated	247	1,200	400
	112	1,440	540	249	1,500	360
	114	1,200	600	250	1,750	434.40
	116	1,200	500	250	1,200	700
	120	1,332	Not estimated	250	1,500	Not estimated
	120	1,200	Not estimated	250	1,500	500
	120	1,440	480	250	1,080	Not estimated
	120	1,400	720	250	1,500	Not estimated
	120	1,200	Not estimated	250	1,500	500
	122	1,500	365	250	1,500	365
	123	1,500	720	260	1,860	1,000
	125	1,080	Not estimated	275	1,740	240
	125	1,320	Not estimated			
	125	1,200	300			
	125	1,200	240			
	125	1,200	300	300	\$1,980	\$480
	125	1,500	520	308	1,440	300
	125	1,200	Not estimated	350	1,200	900
	125	1,640	242	357	1,260	300
	125	1,080	Not estimated	390	1,200	600
	125	1,200	Not estimated			
	125	1,800	480			
	125	1,140	500			
	125	1,380	400	400	\$1,380	Not estimated
	125	1,200	520	410	1,500	Not estimated
	130	1,320	350	450	1,800	500
	130	1,440	Not estimated	450	1,800	Not estimated
	130	1,080	Not estimated	461	1,740	Not estimated
	130	1,080	400			
	130	1,620	700			
	130	1,380	540	500	\$1,440	\$480
	130	1,500	400	550	1,500	480
	132	1,200	360	646	1,500	1,000
	135	1,320	600	1150	1,320	240
	135	1,500	600	1500	1,260	375
	135	1,500	Not estimated	2000	1,320	540
	136	1,320	400	2500	1,750	720
	140	600	480			
	140	1,500	600			
	143	1,200	Not estimated			
	145	1,560	600			
	145	1,500	800			
	147	1,320	Not estimated			
	147	1,080	600			
	150	1,500	475			
	150	1,200	800			
	150	1,620	480			
	150	1,500	600			
	150	1,500	500			
	150	\$1,500	Not estimated			
	150	1,200	\$700			
	150	1,500	350			
	150	1,380	780			
	150	720	Not estimated			
	150	1,500	422.50			
	150	1,500	416			
	150	1,320	420			
	150	1,200	360			
	150	1,380	700			
	150	1,500	600			
	150	1,200	400			
	152	1,440	600			
	153	1,860	365			
	160	1,500	360			
	160	1,500	480			
	164	1,020	674.40			

200 to 299 Bed Group

300 to 399 Bed Group

400 to 499 Bed Group

500 Beds and Over Group

CHANGE MEETING TO GREENSBORO

The annual meeting of the North Carolina Hospital Association will be held at Greensboro, May 13-14, at Hotel O'Henry, according to the latest announcement of the executive committee. It was formally planned to have the meeting at Pinehurst. Definite plans for the program have not yet been arranged.

The tenth annual meeting of the American Association of Industrial Physicians and Surgeons will be held at the Hotel Traymore, Atlantic City, N. J., May 25 and 26.

The Ohio Hospital Association will hold its annual meeting at Columbus, June 2 and 3, according to a recent announcement of the president of the association.



The MODERN HOSPITAL

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THE HOSPITAL ROUND TABLE AS AN EDUCATIONAL MEDIUM

HOSPITALS have long recognized the fact that their sole function is not merely the treatment and care of patients. Many are meeting their responsibility to the community at large by training interns, nurses, dietitians, laboratory technicians and social workers. Not so well recognized, however, is the responsibility of the hospital administrator for the training of capable executives. For these there is a constantly increasing demand because of the rapid expansion of the field.

In the absence of courses in hospital administration in our universities, hospitals must, in the main, recruit their future superintendents from present department heads and, in the case of the larger institutions, from the superintendents of the smaller hospitals. What better training can these individuals secure than that obtained in monthly, fortnightly or even weekly round-table conferences of the superintendent and the heads of the various departments? Not only is there opportunity here for the ironing out of knotty problems as they arise in the different departments but also for the discussion of the general problems involved in the organization and operation of a hospital.

Most large hospitals and many smaller ones now have regular meetings of their medical staffs at which their work as individuals and the general medical work of the institution is subjected to critical analysis. These meetings have proved of inestimable value in the education of physicians and surgeons. Of equal importance are regular meetings of the lay staff of the hospital for the study and critical analysis of common and related problems.

The educational benefits of such conferences do not lie wholly in the remote future. They may be expected to show practical benefit immediately, both to the superintendent himself, because of the disciplinary results of organizing his knowledge for teaching purposes, and to his department heads through the development of an intelligent understanding of the problems of other departments of the hospital, and also a clearer vision of the relationships that must necessarily exist between all the departments of an efficiently conducted hospital.

STANDARDIZING THE COMMON TEASPOON

AT FIRST thought the idea of standardizing the teaspoon may seem to be a meticulous measure and an over-conscientious attempt at economy. But a perusal of the article which

appears on page 500 of this issue will, we believe, convince the reader of the need for the standardization of the teaspoon as an economic measure in the administration of liquid medicines.

The standard teaspoon used by apothecaries has a capacity of sixty minims while the teaspoons in common use range from seventy-five to ninety minims, or a capacity of from one and one-quarter to one and one-half that of the standard teaspoon. This difference results in an overdose of from fifteen to thirty minims with each teaspoonful.

The waste is plainly shown in the example cited by Mr. Swallow. If all teaspoons had a capacity of sixty minims, a four ounce bottle would last a patient ten days, if the prescription called for a teaspoonful three times a day. But when the patient uses the common teaspoon he gets only twenty instead of thirty-two doses from one bottle. Therefore, he is obliged to return to the dispensary every seven instead of every ten days.

Estimating an average cost of twenty-five cents for each bottle of medicine, the annual cost of these drug supplies for fifty patients amounts to \$694, whereas if the standard teaspoon were used, the cost would be but \$456—or a difference of \$238 annually. In one year the patients using the standard minim teaspoon return to the dispensary fifty-two times while those using the sixty minim or standard teaspoon return but thirty-six times.

Discounting the harm which would result from overdosage, in the case of potent drugs, consider the tremendous loss in time and money which the use of the common teaspoon causes the patients, the doctor and all those persons who are concerned with the dispensing of drugs. The extent of the waste becomes more apparent when we consider that of the 3,750,000 patients who are annually handled by the dispensaries of this country probably one-fourth take medicine administered by the teaspoon.

In the light of these facts, the Division of Simplified Practice of the U. S. Department of Commerce should be urged to give prompt consideration to the standardization of the teaspoon along with some of the other hospital and dispensary equipment which is now being standardized. The American Hospital Association may well take the initiative in promoting the standardization of the teaspoon and other articles of daily use which cause needless waste.

DO YOU DRIVE OR DIRECT?

THE modern idea of the supervisor or superintendent is strikingly described by Miss Grace Day in "Changing Conceptions of Supervision" which appears on page 469 of this

issue. She shows that the day of vested authority which is expressed by means of tyrannical supervision and in return exacts blind obedience is gone. This system has failed in education, in industry, and will fail in every institution, whether it be the hospital or the factory, where human individuals are or should be the first consideration.

In the past a supervisor of teachers or nurses, or a hospital superintendent planned the work and did the thinking for the group under direction. The members of the group had to follow directions without swerving from the path of servitude. But we hope, as Miss Day says, "that we are coming into a larger respect for human personality than the world has hitherto put into practice."

It would seem that the dominance of the personal equation in the hospital, more than in other institutions, should be a factor for the advancement of modern ideas of supervision and direction. Although the carrying out of directions in medical and surgical work requires implicit obedience, that fact should not mean that all initiative should be stifled and that military discipline, carried to extreme, should predominate in all departments of the hospital.

Yet too many superintendents of hospitals and directors of nurses are failing to produce well-developed hospital personnel by just such *en masse* military superintendence, which can only dwarf the personality of the individuals of the group and produce routinists who are destined to be inclosed in the rut of servitude the rest of their lives. Instead of leading out latent ability and releasing creative tendencies, such supervision stifles the growth of the talent which makes the individual a leader.

If the institution is to progress and if its individuals are to develop to their fullest capacities, the superintendent, the heads of the departments, and the various executives, must not lose sight of the fact that theirs is the task of educating and developing the individual, not through dictatorial direction but through that inspirational guidance which promotes individual initiative and stimulates that cooperative partnership of director and directed which is necessary for successful work.

The task of supervision in the hospital is beset with difficulties and is, therefore, too often executed along the path of least resistance with the time and materials at hand. But in the end it pays the institution and everyone concerned to have as executives individuals who are trained and experienced in modern methods of supervision.

IODIN AND GOITER

IN FULFILLING their obligations to the community as public health centers, emphasizing preventive as well as curative health work, the hospitals through their nursing and social service departments can do much to broaden the application of specific health measures of whose practical value there is no longer any question. One of these measures which has gradually been introduced into this country during the past decade is the prevention of simple goiter by the administration of minute quantities of iodine. In this measure we possess an effective prophylactic against thyroid enlargement, especially during those periods of life when it is most prone to occur—during pregnancy and adolescence. While an immense amount of research has been carried out concerning the relation of iodine to the thyroid gland, the hospital and general public have but recently become aware of its practical application. Its benefits should now be brought to the attention of a much wider audience; and it is to urge the importance of public education along this line that we refer to the matter.

The story of iodine from its discovery in seaweed to the demonstration of its intimate relation with the thyroid gland, unfolding page after page until the climax of successful prophylaxis arrived, is one of the romances of modern science. The last chapter concerning details of practical application under various conditions, the relative value of different methods of administration of iodine and the question of suitable controls is just now being written.

The present position of iodine in the prevention of simple goiter may be summed up as follows: An overwhelming amount of data, checked by many observers in different parts of the world and substantiated by experimental investigations of note, speak strongly in favor of a deficiency of iodine as the most important, if not the main, factor in the development of simple and endemic goiter. The infectious theory of the origin of goiter does not appear at present to be supported by enough conclusive evidence to justify its acceptance.

Goiter has been shown to be prevalent in those regions of the world where there is a deficiency of iodine in water and food, and is rare where sufficient iodine is present, although it may appear in relatively small amounts compared with the other organic and inorganic elements of the diet.

It has been conclusively demonstrated that the thyroid gland is the essential organ of the body which stores the iodine to be drawn upon for physiological purposes. The active iodine containing substance has been isolated chemically, and its

properties studied. Deficiency of iodine in the thyroid is due primarily to insufficiency of intake in water and food, and leads to overgrowth of that gland with the production of definite and characteristic signs and symptoms of disease.

Simple, or endemic, goiter may be easily prevented by the administration of small quantities of iodine in any form. Iodine may be supplied by fruits and vegetables rich in iodine or by potable waters known to contain the element. In goitrous regions a deficiency may be supplied by iodides in confection form, by means of iodized table salt or by treating the public water supply with minute doses of sodium iodide.

The iodization of table salt is a long step in the direction of wider application and has many points to commend it. It must be thoroughly standardized, however, and careful studies made of its effects in both goitrous and non-goitrous regions.

The iodization of public water supplies in those places where goiter has been shown to be prevalent, would seem to be a logical measure for the protection of the whole community. This has actually been tried in at least two cities, but it has not been in operation over a sufficient length of time to furnish conclusive evidence of its efficacy under varying conditions. There is, however, no more inherent reason why water should not thus be iodized than there is why it should not be chlorinated or treated chemically for other necessary purposes. It has not been shown that such small quantities of iodine as are necessary to prevent endemic goiter are harmful to normal persons or to those who have other forms of goiter. The bulk of the evidence is in the other direction.

It cannot be too strongly emphasized that the diagnosis and treatment of the different types of goiter should be undertaken only by skilled and well qualified physicians and surgeons. The hospital and public health fields are concerned primarily with the prevention of simple or endemic goiter. In the prevention of this disease the health official and hospitals in regions where goiter prevails, have an important new opportunity and a compelling new responsibility.

**TELL US HOW YOU CELEBRATED
MAY 12**

We plan to have in our June issue a description of how various hospitals celebrated National Hospital Day. Hospitals which have unusual or particularly successful celebrations May 12 and wish to have them included in *THE MODERN HOSPITAL'S* account are asked to have a brief description of the events at our editorial office by May 15.

HOW HOSPITALS HERE AND THERE WILL CELEBRATE MAY 12

ADVANCED plans of hospitals in every section of the country point to a widespread observance of the fifth annual National Hospital Day. From New York to California hospitals will join, May 12, to honor the birthday of Florence Nightingale by centering public attention upon hospital service in various ways.

In promoting the observance of National Hospital Day *THE MODERN HOSPITAL* has had personal communication with over 200 hospitals throughout the country relative to their plans for May 12. The replies show an almost universal enthusiasm on the part of hospitals to open their doors to the community, and form a representative cross section of activities which will feature the day in the hospital field.

Plans Indicate Varied Programs

Varied programs ranging from a simple open house to elaborate receptions, graduating and dedication exercises or unique demonstrations of hospital work are being planned by individual hospitals. There seems to be a decided preference on the part of institutions for the baby party which has proved a popular form of celebration in past years.

Nearly all of the hospitals interviewed are planning some form of open house or tea for the general public as the nucleus of the day's celebration. About one-fourth are planning nurses' graduating exercises, while a somewhat smaller percentage are to have dedication exercises or the laying of cornerstones of new buildings. Combinations of demonstrations and lectures with teas are lending individual touch and local color to the celebrations. A few ideas gleaned from the letters to *THE MODERN HOSPITAL* are of interest as an indication of what other hospitals are doing to make the 1925 National Hospital Day the most successful anniversary from every standpoint.

The committee on arrangements in Cleveland, Ohio, writes that twenty-one hospitals of that city will hold open house and that each hospital has been asked to direct especial attention to some particular phase of its work or some part of its building or equipment. The programs of the various hospitals include exhibits, plays, concerts and teas.

The City Hospital of Cleveland will be open for inspection the entire day and will have as a receiving committee the superintendent and department heads. A group of head nurses and students will act as guides on an extensive tour of the hospital which will include typical divisions of the various departments. Each tour will include not more than twelve people and will end at the nurses' home where a light lunch with tea will be served in the living rooms. The occupational therapy department will have an extensive display of the products made by the patients of the psychopathic division.

Attention Focused on Vocation of Nursing

That nurses are playing an important part in the day's activities, as is in keeping with the birthday of Florence Nightingale, is shown by the large number of hospitals which will focus attention upon the vocation of nursing by graduation exercises and by the nurses' active participation in the programs and social functions of the day. The Bridgeport Hospital, Bridgeport, Conn., will have a

display of nursing activities in a prominent window in the business section and will arrange to have thrown upon the screen at motion picture houses a brief word picture of the opportunities for nurses and work being done by the hospital. At St. Joseph's Hospital, Omaha, Neb., attention will be focused upon the nursing personnel of that hospital by an alumnae reunion banquet which is to be held on the evening of May 12 in honor of the graduating class of 1925. The banquet will be followed by an informal dance for the nurses. At Mercy Hospital, Chicago, Ill., the evening program will be given by the student nurses with, perhaps, a talk by one of the staff members.

At the Delaware Hospital, Wilmington, Delaware, the nurses will act as hostesses for the hospital and will conduct all visitors through the hospital departments and the nurses' home. The celebration of the Methodist Hospital of Southern California, Los Angeles, will center around the opening and dedication of the new nurses' home and wing of the hospital. St. Luke's Hospital, Fargo, N. D., will have nurses' graduation and open house with special invitations to high school and college students. At St. Joseph's Hospital, Tacoma, Wash., the alumnae nurses will act as guides to conduct people through the building. In addition to the regular open house, the Harrisburg Hospital, Harrisburg, Pa., plans to present two portraits of Florence Nightingale to the high schools of the city. The pictures were donated by friends of the hospital.

Opening of New Building Featured

A number of hospitals have arranged to feature the opening of new buildings or to demonstrate the equipment of new departments. The Mary Immaculate Hospital, Jamaica, L. I., plans to precede its celebrations by breaking ground for the new hospital Sunday, May 10. The Butterworth Hospital, Grand Rapids, Mich., is planning the opening of its new 275 bed hospital during the week of National Hospital Day. The feature of the celebration of St. Mark's Hospital, Salt Lake City, Utah, will be the new ward for crippled children made possible through the Shriners' Fund for Crippled Children. St. Luke's Hospital, Duluth, Minn., will have its new building open for inspection.

The Touro Infirmary, New Orleans, La., plans to have memorial tablets unveiled in its maternity and children's wards. The tablets are for the Rebecca Keifer Newman Clinic and the Henry Newman Maternity Department.

The Highland Park Hospital, Highland Park, Ill., is making May 12 the occasion for the introduction of its new superintendent, Miss Elizabeth Thomas, formerly of Cook County Hospital, Chicago. The hospital will hold an informal reception for Miss Thomas.

The Brooklyn Hospital, Brooklyn, N. Y., will have open for inspection its new x-ray, cystoscopic and dental departments. The City Hospital of Akron, Ohio, will feature its new x-ray department which has recently been equipped with a new deep therapy apparatus. The Bushwick Hospital, Brooklyn, N. Y., plans to have the installation of radio ear phones for every patient, nurse and employee of the hospital.

A few hospitals will place emphasis upon the educational side of the hospital by featuring demonstrations

and lectures. The Englewood Hospital, Englewood, N. J., will have window exhibitions of the furniture for its new hospital rooms and another window showing nursery furnishings. The institutions will be hostess to the women's auxiliary in each of the twenty-four towns which the hospital serves. The City Hospital, Worcester, Mass., will have an open public lecture in the out-patient department on some general subject of interest on the evening of May 12.

The Finley Hospital, Dubuque, Ia., reports such a successful laboratory and museum demonstration last year that the hospital will probably repeat a similar demonstration this year. Last year certain cases in which the x-ray findings could be correlated with the museum specimens were demonstrated by clinicians. The interest of the visiting public was so great that the demonstrators were obliged to stop from time to time so that groups would move on and make way for the interested throng.

Baby Parties Predominate

The ever popular baby parties promise this year to have interesting departures in a number of hospitals. The Stamford Hospital, Stamford, Conn., will feature a babies' frolic on the lawn during the afternoon and each of the hospital's babies will receive a souvenir in the form of an attractively wrapped package containing a box of powder and a cake of soap. The Thomas D. Dee Hospital, Ogden, Utah, is inviting as guests all the babies who were born in the hospital during the past year. The babies and mothers will have their picture taken and each baby will be given one dollar to start a bank account. A baby clinic will then be held in which each baby will be examined and the mother given a report of the examination. Wesley Hospital, Wichita, Kan., is inviting all the babies who have been born in the hospital during the past three years. The Mercy Hospital, Baltimore, Md., will have as guests all the babies born at the hospital during the last ten years who will be photographed en masse.

The Mercy Hospital, Baltimore, Md., is planning an all-round celebration, the chief features of which are the open house with demonstrations by the heads of departments; distribution of souvenir buttons of the day; the annual baby party; and a concert.

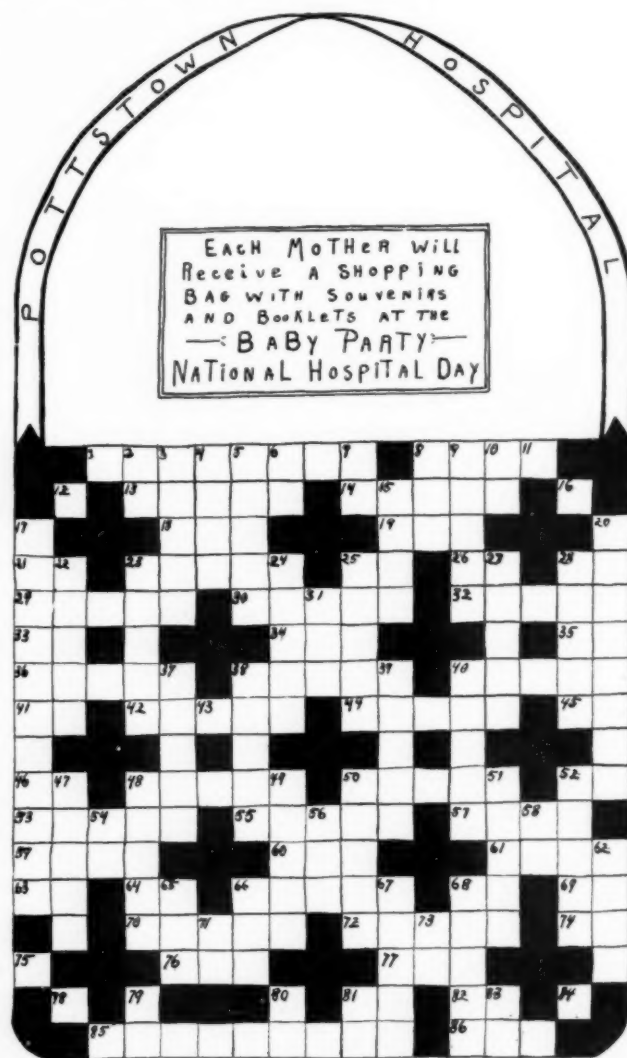
Has Cross-word Puzzle Contest

The Pottstown Hospital, Pottstown, Pa., is planning a most complete celebration with activities extending over a number of days. As was mentioned in our April issue, page 340, the hospital is conducting a cross-word puzzle contest. A reproduction of the puzzle to be used appears below. The contest is open only to people of the community but the puzzle may be of interest to enthusiasts outside the locality.

Several of the leading department stores are planning window displays of hospital supplies, sick room equipment the week previous. One local drug store window will contain a miniature modern hospital ward with correct furniture, patients, nurses and doctors. A bulletin will be published and sent throughout the community. May 11 and 12 a motion picture film called "In Florence Nightingale's Footsteps" will be shown in a local theater under the auspices of the alumnae association of the hospital. Two hundred invitations have been sent out to the mothers of hospital babies for the baby party which will have as a special feature a health talk by the head of the Child Welfare Bureau, Harrisburg, and the distribution of in-

structive literature on the care and feeding of infants.

Winners of the cross-word puzzle contest will receive their awards from the board of managers May 13 at the open house which will be followed by a musical program.



Shopping bag puzzle of the Pottstown Hospital, Pottstown, Pa., designed for the contest which is being held by that hospital in connection with National Hospital Day celebration.

HORIZONTAL

1. Girl's name.
8. National Hospital Day.
12. Zero—nothing.
13. A plant cultivated for its aromatic seeds.
14. Abiding place.
16. Indefinite article.
18. Distress signal.
19. Fish spawn.
21. Exist.
23. Leaf.
25. Exist.
26. An addition made to a letter or book. (abbr.)
28. A country in the Western Hemisphere. (abbr.)
29. Apparition.
30. To produce, assent.
32. Firmly held together, compact.
33. Pronoun.
34. Way, road.
35. An interjection used by Swedes.
36. Relates, informs.
38. Holy City of the Mohammedans.
40. A game.
41. Pronoun.
42. A gelatinous or slimy substance secreted by membranes.

66. Form of light.
67. A person who cares for sick and infirm.
68. A pointed arch.
71. A prefix signifying again, anew.
73. Prefix signifying negation.
79. Exist.
80. Sun god.
81. Prefix signifying belonging to.
83. Prefix signifying in or into.

2. A syllable used to denote a tone in music scale.
3. Attack, assault.
4. Uproar.
5. A short literary composition.
6. A negative prefix.
7. Everyone separately (abbr.)
8. Lowing of a cow.
9. Skilled.
10. Pronoun (Old Eng.)
11. One-twelfth gross.
12. Exclamation of surprise.
15. Form of breed.
17. Heroine of the Crimean War (Surname).
20. Belonging to a nation.
22. Covering for a bed.
23. Sacred song.
24. Period between birth and death (plu.)
25. Destitute of light.
27. Pits or vats for ensilage.
28. Missiles.
31. East India Company (abbr.).
37. A silver coin of Ecuador.
38. Soft muslin (plu.)
39. Cavities or caverns.
40. Ghost, or small nocturnal mammal.
47. Scents, smells.
48. The cry of a sheep.
49. A fantastic character in "Measure for Measure."
50. Prospero's messenger in "The Tempest."
51. Eldest, first-born (term in law).
52. Slowness, tardiness, laziness.
54. Doctor of divinity.
56. Urge, ask.
58. The year of the reign (abbr.)
62. Period of time.
65. A luminary.

The charts also told what work the welfare council did through the hospitals. It was not an appeal for funds for any of the hospitals, but an appeal for funds which the welfare union might carry on its hospitalization.



How the organization of the Blodgett Memorial Hospital, Grand Rapids, Mich., was presented in a recent window display of one of the department stores of the city.

ENRICHING HOSPITAL SERVICE*

BY D. L. RICHARDSON, M.D., SUPERINTENDENT, PROVIDENCE CITY HOSPITAL, PROVIDENCE, R. I.

THE community served by a hospital need not be confined within one city but may include people living in adjacent towns or in country districts accessible to the hospital by means of railroads, trolleys and automobiles. Where good roads are available the motor ambulance has made it possible for a hospital to draw its patients from a much larger area than was practicable in the days of horse drawn vehicles, and twenty-five miles or more is not too far to transport patients if the ambulance is comfortably equipped and drivers are careful. Hospitals can well afford to offer hospital service to their neighbors for it insures a certain definite revenue for support of the hospital and the practice should therefore be encouraged.

One hospital can best serve a community both from the standpoint of economy and efficiency. Such an arrangement eliminates jealousies between competing hospitals and does away with factions in the community. It prevents unpleasant rivalry between the visiting physicians of different hospitals and makes it possible to staff the hospital with capable and interested men. Often the same physicians, particularly specialists, are on the staffs of two or more hospitals and their time and interest are so divided that they cannot serve either with the ability with which they could serve one.

Economically it is a mistake for a community to have two or more hospitals when one would be sufficient. The construction, equipment and maintenance cost is far less for one hospital than for two or more. The money must come either from taxes or gifts, and in any community there is a limit to the amount which can be collected.

One hospital in a community should also enlist the support of all the people, who can point with pride to the service which it is rendering and rally to its assistance when more money is needed for its expansion or maintenance. It is possible to enlist the interest of a community in its hospital as well as in its local baseball or football teams.

500 Beds to Be Maximum Size

No hospital should, however, be larger than five hundred beds. When it exceeds this size efficiency is bound to decrease. The reason is obvious. The success of any hospital depends chiefly upon the superintendent, and when the patients become too numerous it is physically

impossible for him to insure adequate medical and nursing care and to maintain the best relations between patients, relatives and the hospital personnel. When a hospital approaches this size it is wise either to provide special hospitals to relieve it from treating obstetrical, contagious or other special groups of patients, or to build another general hospital.

The money for the construction of a hospital, or additions, may be raised either by taxes or by donations. Public hospitals, whether city, county or state, are and should be built with money obtained by a bond issue.

The construction cost of private, charity hospitals may be obtained either by inducing wealthy and charitably inclined persons to supply the money, or by a so-called hospital drive. The latter method is much used for the need of hospital accommodation has grown faster than the crop of wealthy persons able to finance the sudden hospital expansion of the last few years. The drive has the advantage of arousing the interest of the whole community and the people feel that they have a personal share in the institution.

Finding money for maintenance is another problem which needs careful forethought. Too often when new hospitals are built, little or no attention is given to the question of how expenses are to be met. Part of the money obtained for a new hospital should be set aside for maintenance, so that some income will

be assured which can be supplemented in other ways. Old hospitals, if they do not already have such an endowment fund, should take steps to establish one.

There are other important sources of income. The patients should pay what they can toward hospital costs. It is important for each patient or his family to be interviewed in a painstaking manner to determine whether they are able to pay anything and if so how much. The investigator should have at hand budgets, average and minimum, for families of varying sizes and, by comparing income with expenses, should be able to decide what the patient ought to receive. It is always wise to ask how much the patient is willing to pay because it often happens that he is willing to pay more than the investigator might expect, whereas if he offers to pay too little, the investigator would have data at hand to determine the just amount.

Ways to Raise Maintenance Money

Charity hospitals should plan to treat a certain number of private patients. There are three reasons for this

How to Aid Health Department

ONE function to which the hospital, and particularly the out-patient department should give more attention is the prevention of disease. There should be maintained a close and helpful relation with the health department. The hospital can assist the health officer in many ways: by accurately reporting deaths, medico-legal cases, contagious disease; by providing laboratory facilities; by immunizing people against typhoid fever, small pox, diphtheria and rabies, and by examining food handlers.

Unless such facilities are already provided, the hospital can and ought to establish diagnostic clinics for the benefit of the physicians in the community, and also clinics for periodic examination of persons desiring such examination and not able to pay for it.

The hospital can be of help to courts by giving information as to the mental condition of persons brought for trial and as to the existence of venereal diseases.

*Essay awarded third prize in The Modern Hospital Publishing Company's essay competition on "The Interrelationships of Hospital and Community," which closed November 1, 1924.

practice: first, these patients add to the hospital income; second, among the private patients are sure to be persons of wealth who may become interested in the hospital and be of great help, both financially and in other ways; and third, the hospital owes it to the men on the staff, who are caring for the free or part-pay patients, to make provision for their private cases.

Another source of revenue is public funds, namely, appropriations by cities, towns, counties and states. This applies particularly to communities where there are no city or county hospitals. Citizens should be willing that funds be given to deserving hospitals out of their taxes to help pay for those patients who are poor.

During recent years there has come into being, particularly in middle western cities, another source of revenue, namely the community chest. It consists of a community drive to raise at one time, annually, the money for the support of all charitable institutions and societies. The money raised is then divided pro rata, depending upon the expenses of the institutions and societies during the previous year. This method of raising money obviates individual campaigns which are often irritating to contributors.

Hospital Should Stand on Its Own Feet

When first instituted, this big annual drive for money rather generally met with the approval of the public, and to the satisfaction of the charities interested. In some cities however subsequent drives have not yielded so much and institutions and societies have not always been satisfied with the total amount raised or with their individual allotments. There is a belief among competent observers that the community chest has been fostered by large givers to charity, to lessen the strain on them, and that while it may be successful in many cities, each individual charity should stand on its own feet and be given what it deserves in the opinion of the public, rather than be dependent upon a committee to distribute the funds raised in a general drive.

There is still another very good means of meeting annual deficits in hospital maintenance, namely, the underwriting of deficits. A list of well-to-do people in the community are asked to guarantee to meet the deficit at the end of each fiscal year, provided the assessment does not exceed a certain amount. A limit of \$25, \$50, \$100 or more is provided in the contract which each giver signs. This method of meeting deficiencies has proved acceptable to hospitals which have tried it.

Lastly, some revenue may be obtained from the laboratory, the x-ray service, the pharmacy, from small outpatient charges and from hospital waste.

Hospitals Should Receive T. B. Patients

The service which a hospital should render a community depends upon local conditions. A general hospital should not, ordinarily, be called upon to care for insane patients or those suffering from tuberculosis. There are usually public institutions for these diseases. In recent years, however, many authorities upon tuberculosis have urged hospitals to accept for treatment advanced cases of pulmonary tuberculosis. Their advice is worthy of consideration in spite of the fact that hospitals now refuse such patients, fearing that their wards would be overrun by them. These patients will not go, nor will their relatives allow them to go to a sanatorium for treatment because it is usually situated so far away. They want them to be near home during their few remaining days. And yet many of these patients should be in an institution

because they cannot have proper treatment at home or because they expose other persons, particularly children. Since such generous provision has been made for tuberculosis patients in state and city institutions, and since the number of cases has decreased so much, there is little danger of a hospital being overtaxed. A certain number should be accepted for the reason stated and for the purpose of educating doctors and nurses who might never otherwise see much of this disease. Moreover, the city or state might be willing to pay the hospital for this class of patients.

Usually the city maintains a contagious disease institution so that general hospitals are not called upon in this connection. However, in communities where the contagious disease hospital has less than fifty beds it is more economical to have contagious disease wards attached to well equipped general hospitals, and patients will receive more scientific treatment in this way.

Advocates Contagious Disease Wards

There has long been a feeling that contagious diseases are a menace to other patients and to the hospital personnel, but this is a wrong impression. When the contagious wards are properly built, properly equipped and well managed there is little danger. Here again such patients are an important factor in the education of doctors and nurses, few of whom would otherwise see more than isolated cases of the common infectious diseases.

Assuming that a single hospital is to serve the community it is important to plan with care the work which it should do in the treatment of the sick, in the prevention of disease, and in the education of doctors and nurses.

The number of hospital beds needed for a community will depend upon certain factors. The number of beds needed in an industrial area or where the people live in crowded tenements and apartment houses, will be greater than the number needed in residential and rural communities. The only exception to this rule is that the number of beds for surgical patients and perhaps for contagious diseases should be about the same in all types of communities. Excluding provision for the insane and pulmonary tuberculosis patients, there will be needed about fifty beds per 10,000 of the population. Of these, four beds per 10,000 should be provided for obstetrical patients, six or seven beds per 10,000 for contagious diseases, including acute venereal diseases and about two to three beds per 10,000 for neuro-psychiatric patients. The balance of the beds should be divided between medical and surgical patients, including both medical and surgical specialties. The number needed for surgical patients will exceed that needed for medical patients about three to two except in cities where hospitalization of medical conditions is rather common.

Special Services in Large Hospitals

The three fundamental departments to which patients belong are medical, surgical, and pediatric. In small hospitals where specialists are not available these departments will suffice. In large hospitals, where there are many patients under treatment for special diseases, and where good specialists are available, the following services should be established: obstetrical; nose, throat and ear; eye; dental; neuro-psychiatric; orthopedic; gynecological; genito-urinary, and dermatological.

Realizing that exact estimates of the bed capacity needed cannot be made and that demands constantly increase, it is important in planning a hospital to provide for easy and economical expansion. Walls should be

thick enough to support more stories, and provision should be made for extending the length of buildings and for new wings, so that if additions are built they will fit in with existing buildings advantageously. In fact the plans of a hospital should be drawn for an institution much larger than the one immediately contemplated, and these plans should be followed out as increased capacity is needed.

Elasticity of Ward Service Necessary

It is not possible to plan accurately the number of beds needed for obstetrical, orthopedic, eye, ear, nose and throat and gynecological cases, and for other patients suffering from special diseases. It is important that patients belonging to different departments be grouped together. To obviate one ward being overcrowded while other wards are partially empty the wards should be planned to meet any situation. To provide for elasticity large wards should be avoided and no room planned to accommodate more than six or eight patients. About fifty per cent of the rooms should be for one to three patients. Different toilet rooms should be provided for the sexes. Following such a plan a single ward can be used for patients of different sexes and different ages, making it possible to group the same diseases, or patients belonging to the same service. This plan will also provide for the isolation of patients who are noisy, disagreeable or suspected of having some contagious disease. By adopting this construction a ward can be utilized at full capacity at all times.

Every hospital should maintain an out-patient department. It acts as a feeder to the hospital, provides for a community need, helps to train the staff and to correlate the treatment of patients who are at one time bed patients and later ambulatory. There is no better training for staff physicians, interns and pupil nurses than that received in a good out-patient department. The patient's record of previous illnesses can be easily consulted and the patients can be followed for years in a personal way, just as the physician follows his families over long periods of time.

O.-P. D. Should Be Near Hospital

The clinics should, so far as possible, be on the hospital grounds, but in large cities they may be located at strategic centers but under hospital administration. The hospital facilities will be available to such detached clinics, which insures accurate diagnosis and efficient treatment. Clinics detached from hospitals are less efficient and their establishment should not be encouraged. The out-patient department should be in the same building as the hospital or close to the admitting section, the laboratory, the drug store, the hydrotherapy and mechanotherapy departments and the common record room, so that these departments can serve both the hospital and out-patient cases. Such a location brings the out-patient and in-patient services together, making it possible for the out-patient staff to follow their cases after admission to the hospital and vice versa.

There are three fundamental departments in every out-patient department: medical, surgical and pediatric. The next important clinic are nose and throat, ear, eye and dental. These departments may suffice in smaller communities. In larger out-patient departments certain other branches should be added as follows: neuro-psychiatry; orthopedics; gynecology; genito-urinary; dermatology and tuberculosis.

The decision to establish any one of these clinics will depend upon the number of patients and whether there

are competent specialists in the community to treat them.

There is another function to which the hospital and particularly the out-patient department should give more attention, namely, the prevention of disease. There should be maintained a close and helpful relation with the health department. The hospital can assist the health officer in many ways: by accurately reporting deaths, medico-legal cases, contagious diseases; by providing laboratory facilities; by immunizing people against typhoid fever, small-pox, diphtheria and rabies, and by examining food handlers.

The board of trustees of a hospital should consist of from five to seven members. A board of less than five members is hardly representative; one of more than seven becomes unwieldy. The trustees should be chosen for their ability, character and interest in the hospital and because they are respected citizens who are able to secure the necessary funds for maintaining the hospital.

Every trustee should visit the hospital regularly during some part of the year to make himself familiar with the work which it is doing. The trustees should choose the staff and lay down the rules by which it is to be governed, decide matters of policy, provide ways and means for deficiencies and expansion, but should not interfere with details of administration which should be left to the superintendent. The superintendent, however, should submit to them a monthly or periodic accounting of the work of the hospital and its financial standing. If he is incompetent he should be replaced rather than interfered with.

Select Staff with Care

A municipal hospital also should be governed by a board of trustees, a majority of whom should be representative citizens. The city government should be represented on this board. Such an arrangement provides for public representation and contact with the city government, and at the same time prevents political interference which is fatal to the success of any hospital.

The terms of office of the trustees should overlap so that only a part of the board is chosen each year, to make possible a continuing policy.

The visiting staff should be composed of the most capable and conscientious physicians in the vicinity. Ordinarily they can best be chosen by examining the record of their preliminary education, medical school record and hospital experience. From these sources, and from members of the existing staff or other reliable physicians or hospitals, can be ascertained a candidate's ability and faithfulness in the discharge of his duties.

In some large cities examinations are held for candidates for a position on the staff of a municipal hospital. Choosing men from the results of examinations alone is not satisfactory but if the candidates receiving the highest marks are investigated it is possible to select physicians who are not only well educated but also trustworthy and faithful.

It is the usual custom for the trustees to accept the recommendation of the staff committee when new men are selected. It is very important however that the trustees make inquiries of their own to confirm the recommendations. This will help to avoid domination of the staff by one man or a group of men for personal reasons. The judgment of the superintendent should be ascertained for he is usually an unbiased observer.

Condemns Open Hospital

In many western cities any physician is allowed to send a patient to the hospital and to treat him there. In the East this practice is seldom followed. It is mentioned

here only to be condemned. When a hospital assumes the responsibility of treating patients who are unable to pay full hospital charges, and receives from the public money to meet the expense of such treatment, it cannot afford to allow any doctor to treat these patients unless he is well qualified to do so. Physicians in general are not capable of treating all kinds of cases, medical and surgical, which usually enter a hospital and if the doors are thrown open to incompetent men the hospital and patients, not the doctor, will suffer.

There is some reason in allowing doctors in the community to treat private patients in the hospital, for the doctor then assumes personal responsibility, yet even then a hospital should maintain a preferred list of physicians, who upon investigation are shown to be well qualified, so that the hospital's good name will not suffer because of mistakes and incompetency.

It can be laid down as a basic principle that a hospital's efficiency depends upon the ability of its staff physicians and upon its nursing staff. It is not the stately buildings, beautiful wards, wonderful laboratories or complete equipment which insures efficient treatment. Rather it is the ability and character of the whole staff. Given poor accommodations and limited equipment such a staff can give far better hospital service than an inefficient staff could in the most elaborate institution.

Doctor or Nurse As Superintendent

There is no person so important in a hospital organization as the superintendent. In choosing him the trustees should take sufficient time to ascertain his fitness for the position. The large hospitals should be administered preferably by a physician who has had administrative experience. In smaller hospitals a graduate nurse who has received some training under an older superintendent, should be selected. Laymen do sometimes make good superintendents but preference should be given to a physician or graduate nurse. The great advantage of a medical superintendent is that, in addition to the administration of the hospital plant, he is able to recognize the character of treatment which patients receive and can exercise a great influence in building up a good staff of physicians.

The visiting staff should be divided into departments over each of which one man should preside as chief of the service. The heads of departments and the superintendent should constitute an executive committee whose duties should be to exercise control over the work of the staff and advise the trustees about changes in the staff and other matters pertaining to the treatment of patients. The staff as a whole have had too little, and the staff as individuals too much to say about what should be provided in order that the patients might be served most efficiently.

Avoid Duplication of Service

The relation between hospitals should always be happy. If they are not cooperative but are antagonistic the community is not well served. Hospitals should not duplicate the work of each other unless the field of service is sufficiently large to warrant it. When building a new hospital or making additions to an old one overlapping of work and competition should be avoided by careful study of the community's needs. This will help to prevent having several hospitals maintaining services of the same kind when the community could be served better by one.

This overlapping of service has wasted a great deal of money and it applies particularly to special services

which require expensive apparatus and a lot of assistants. It also usually means that the specialists are obliged to divide their time between two or more hospitals. A visiting physician can afford to give only a certain amount of time to hospitals and clinics, and if the work is concentrated in one place he will be able to give much more efficient service. The coordination of the work of different hospitals is extremely important both from the standpoint of economy and efficiency.

What Follow-Up Work Reveals

Another relationship which should be determined with great care is the relationships of the hospital to other welfare agencies in the community. The point of contact is usually the social service department of the hospital. One function of the hospital which has only recently been given proper attention is the welfare of the patient after he has been discharged from the hospital. It is not sufficient for a hospital to send out patients to their homes and forget them. When they are accepted for treatment the hospital is morally bound to follow them until they are well again or, if they are incurable, to see that they are properly cared for in their homes or elsewhere. Such follow-up of patients reveals the end results of medical and surgical treatment. It is of great value to the visiting staff to determine the accuracy of their diagnosis and the success of their treatment. By learning of their mistakes they adopt better methods and give more painstaking care in their treatment.

The social service department has been established to provide extra-mural care of patients. Before the institution of this service, all good hospitals had endeavored, in a haphazard way, to do some follow-up work but the manifold administrative duties of the superintendent and his assistants prevented any systematic service of this kind.

Utilize Other Agencies

Hospitals usually have their own hospital social workers. Their time is devoted to interviewing patients and relatives and to home visiting. It is the experience of most hospitals that the number of workers has to be increased from time to time until the expense becomes a real financial burden to the hospital. Some of this can be avoided. In most communities there are public health nurses, and welfare social workers supported either by local societies or by the city. Their duties call them to all parts of the community and they are familiar with the families who need home advice and help. It is lost motion for the hospital to do its own home visiting when it can be done equally well by these agencies at much less expense, and these agencies are usually quite willing to do it. The hospital social worker with little trouble can turn over to them written instructions about ex-patients and in this way keep in touch with cases as long as is necessary. The hospital social service department can do much through correspondence, but will be obliged to do some home visiting to solve special problems.

There is one kind of investigation, however, which should not be referred to other agencies and that is the investigation of the ability of patients to pay hospital fees. This work, as well as the collection of overdue bills, belongs to the hospital itself. In some institutions it occupies much of the time of the hospital social worker. It is not however quite in line with her duties and in the larger institutions should be put in the hands of a special investigator or collector.

In this connection it is important to point out that the

financial standing of many hospital patients can be learned through inquiry of the agency which exists in most cities for the purpose of keeping a record of persons or families who are known to one or more charitable agencies. By such confidential consultations considerable time and money can be saved.

The out-patient department requires much social service work. The patients are not under supervision as when they are in the hospital and it is often necessary for them to return for treatment. They need to be followed-up to see that the physician's directions about treatment are carried out, and that laboratory specimens are made available. Some families will on inquiry be found to need financial assistance. Here again the out-patient social worker should use available agencies when it is necessary.

It has been found at one hospital that the public health nurses can profitably be employed during clinic hours to help the physicians in the clinics. These nurses are daily visiting parts of the city from which the patients come and, with little trouble, can call to see that the physician's instructions are carried out. In this manner the public health nurses are kept in close touch with out-patient service.

Personal Contact Important Factor

There are a large number of patients who, on discharge, are referred to their family physician. It is the duty of the social service department to see that these physicians are notified of the treatment given the patient while he was in the hospital and informed of any recommendations the hospital staff wishes to make about after-care.

The hospital social service department should maintain personal contact with the social agencies of other hospitals; chronic hospitals or alms-houses; the court officers; societies for the prevention of cruelty to children; institutions for the blind and deaf; mental hospitals and other special agencies and institutions. The social worker should make personal visits to such institutions in order to meet those whom she will call by telephone when a problem presents itself.

Unless such facilities are already provided, the hospital can and ought to establish diagnostic clinics for the benefit of the physicians in the community, and also clinics for periodic examination of persons desiring such examination and not able to pay for it.

The hospital can be of help to courts by giving information as to the mental condition of persons brought for trial and as to the existence of venereal diseases.

A hospital is potentially an institution of great educational value. It should, so far as possible, train interns and nurses, and should plan their work so that the practical education will be both comprehensive and intensive. To accomplish this it is necessary that a hospital care for a sufficient variety and number of patients or be affiliated with other institutions.

Education One of Hospital's Functions

A hospital is a place for the education not only of nurses and interns but also of members of the visiting staff, and it should be made an educational center for all the physicians in the community. The visiting staff should meet regularly either as a whole or, preferably, by departments. Reports of the work of each department should be made at the beginning of each year and these should be studied with the idea of improving service. Case reports, results of treatment of groups of patients and new methods should be discussed at these conferences. The visiting staff should hold clinics and make ward rounds for the benefit of the other physicians in the com-

munity and the resident staff. A definite program should be made out at the beginning of the year and adhered to as strictly as possible. Through such conferences the staff is greatly benefited, as are the other physicians who listen and discuss various problems.

Hospitals owe it to the community to provide for the education of children who will be in hospital for considerable periods of time. Any hospital where patients receive excellent medical and nursing care will be held in respect by the public. There is no better advertisement than the patients themselves. If they have been restored to health and kindly treated they will spread the news far and wide, while on the other hand a dissatisfied patient can do much harm. Every hospital should first of all strive to make people well by using scientific treatment, but it is almost equally important that the patient and his friends shall be kindly received and the hospital stay made as pleasant and painless as possible. Too often physicians and nurses hurt patients unnecessarily when a little care or a primary anesthesia would prevent needless suffering.

More Publicity Needed

A hospital may and should keep the public informed about its work and its needs. A meeting should be held at the close of the hospital year at which a report should be read detailing the record of patients treated during the year, changes in personnel, improvements and financial standing. Press representatives should be given advance copies of the report for publication. The hospital should be thrown open to the public so far as possible at the graduation exercises of nurses, at Christmas entertainments for the patients and at similar celebrations. The opening of a new building or ward can well be made an occasion for inviting the public to attend the formal opening. At times a representative of the press should be given feature stories of unusual cases. Care should, however, be taken that no individual or individuals are allowed to make use of such cases for advertising purposes.

Give Visitors Personal Attention

There is still another way of maintaining the good will of the public and other institutions, and that is by according visitors to the hospital personal attention. They arrive with the intention of seeing the whole hospital or particular departments. They should not be obliged to wait nor should they be sent around with some employee who knows little about the hospital. This is a matter which the superintendent should attend to personally and if he cannot accompany the visitor himself he should interview him and put him in charge of some member of the staff who is fully able to give the desired information.

If a hospital does good work, keeps the public informed of its activities and is straightforward and frank with patients and the public, the hospital authorities may rest assured that the community will stand behind them to the best of its ability.

HOSPITALS AND DISPENSARIES: 1923

The Bureau of Census of the U. S. Department of Commerce has just issued the bulletin "Hospitals and Dispensaries" a statistical compilation of the hospitals and dispensaries in the United States according to the 1923 federal census of institutional population.

No individual is to be regarded as a means to an end no matter how worthy that end.—Grace A. Day.

THE THEODORE B. WILCOX MEMORIAL HOSPITAL, PORTLAND, OREGON

By ELLIS F. LAWRENCE, F.A.I.A., AND WILLIAM G. HOLFORD, A.A.I.A., ARCHITECTS, PORTLAND, OREGON.

THE Theodore B. Wilcox Memorial Hospital, used as a maternity hospital, was erected by funds donated by Mrs. Wilcox and family. The building is fire-proof, of reinforced concrete frame, floors and walls, veneered with red brick and trimmed with stone. For the purpose of erecting and equipping the building, \$125,000 was available.

Mrs. Wilcox expressed wish was that with the funds available, as many beds as possible be provided, with modern conveniences. It was also her wish to give the building a domestic character, both as to the interior and exterior appearance, in so far as this could be done without sacrificing efficiency.

Building Domestic in Character

In planning the building, these two points, together with the arranging of delivery and operating rooms to provide for a future wing, were the governing factors. From considerations of first cost and maintenance, corridors and rooms were made as small as comfortable usage would permit.

The building is located across the street from the main buildings of the Good Samaritan Hospital. The preparation of food, laundry work and heating are provided for in the main buildings. The nurses also have quarters in the nurses' home of the hospital.

The basement provides a formalin room, rooms for a stationary vacuum cleaner machine, soiled clothes closet, in which a laundry truck is placed to receive clothes through a chute, a paper chute for ward waste, small pathological laboratory and a service room. From the service room food wagons are lifted by dumb waiters to the serving kitchens.

Lobby Separated from Business Offices

The first floor entrance on the front opens into a paneled lobby with a fireplace at one end, furnished with easy chairs and rug. At the right of the door is the office.

The lobby is closed at the side opposite the entrance door, thus cutting off the administrative rooms. Visitors thus leave the lobby through a door at the right which leads to the elevator. Doctors reach their room through the left of the lobby. Patients enter the building through the main lobby or by the auto entrance, under a marquise. The rear entrance permits a patient to go directly to the elevator and to her room, without entering the public lobby.

This floor provides ten beds—six in two-bed wards and four in private rooms. Two rooms at the right end of the corridor are arranged to be closed off, if necessary, to care for infection and contagion. One of these rooms has a toilet for the nurse and an utensil sterilizer with slide opening into the corridor, so that utensils may be sterilized before returning to the hospital. The suite has a separate outside entrance to care for such removal as waste and linen. Each room is equipped with a lavatory and a clothes closet for each patient.

A serving kitchen equipped with a steam table, broiler and toaster, dish-washer and refrigerator provides serving and diet facilities. Hot and cold sterile water, piped from the floor above, is also provided in the kitchen.

A utility room, equipped with bedpan sterilizer, utensil sterilizer and cabinet, slop sink, folding work table, work sink and specimen cabinet, vented to the outside, provides working facilities for the nurses.

No bathtubs are provided, except a portable tub for treatment, shower baths having been installed instead. At the center of the corridor is the nurses' station with a telephone signal system and medicine closet.

Second Floor Provides Ten Beds

The second floor provides ten beds—eight in private rooms and two in semi-private rooms. The serving kitchen is equipped similarly to that on the first floor, with addition of milk pasteurizer and water sterilizer. Utility rooms and bathrooms, and nurse's station are located in



Perspective of the Theodore B. Wilcox Memorial Hospital for the Good Samaritan Hospital, Portland, Oregon.



First floor plan, showing offices, rooms and entrances.

the same positions as on the first floor.

The nursery is equipped with individual bassinets. Opening from the nursery is the washroom with two bathing slabs, laundry, tray, and sink. Adjacent to the wash room is the steam heated blanket warmer for the babies' blankets.

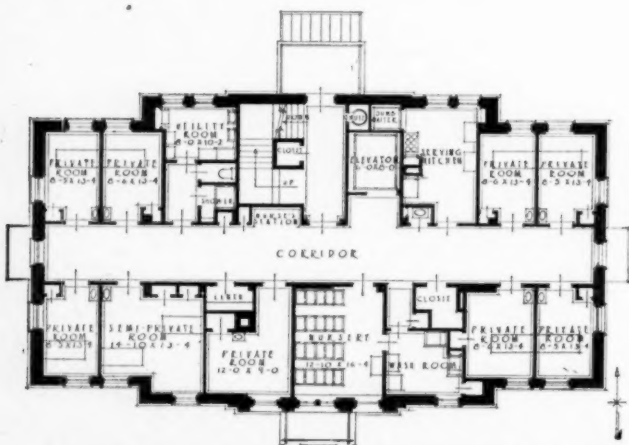
The third floor provides a waiting room with toilet, outside the operating corridor, two delivery rooms and one operating room, doctor's scrub-up and locker room, x-ray room, preparation room, work room and sterilizing room.

Operating and delivery rooms are finished with five foot green tile wainscots, grey flint tile floors, coved base and angles. The sterilizing room is equipped with dressing sterilizers, water instrument with two 25-gallon tanks, and utensil sterilizers and instrument sinks.

Sterilizing room, preparation room, serving kitchens, and utilities have tile floors and wainscots. All rooms, other than those described, have cement floors, plaster walls and a sanitary composition base.

Cement floors are covered with dark grey battleship linoleum, flush with the cove of the sanitary base. Grey color was selected because of the pleasant background which it affords for the rugs placed in the wards and lobby.

All partitions are of hollow tile, into which metal doors flush with the plaster jambs are built. The stop on metal jambs terminates two inches from the floor to permit the cove of composition base to be carried through the door opening. Doors are flush type single swing, opening into wards with push plate on corridor side and arm hook on inside, held closed by overhead door check and opened by a foot bolt.



Second floor plan, showing rooms, nursery and kitchen.



Third floor plan, showing operating, delivery and x-ray rooms.

Electric light signal system is used with bedside release and tell-tale in the office. Sterilizing rooms, serving kitchens, toilets, baths and utilities are ventilated by a fan in the roof. Operating and delivery rooms are supplied with forced washed fresh air and forced exhaust.

The heating system is forced hot water, direct radiation, hung on the walls. The ward windows are arranged with transoms, so that air may be admitted without creating a draft.

Walls and ceilings throughout are painted and then stippled to prevent reflections. Artificial lighting for rooms and wards is from overhead semi-direct diffusing fixture of two intensities, controlled from double control switch. A soft diffused dim light, together with bedside light, is used for general purposes, with more intense light for special and emergency use.

All doors and the elevator and corridors are sufficiently large to permit the passage and handling of a bed. The knee type of valve on water and waste lines, and elbow valves on soap dispensers, have been adopted and, in an effort to avoid possible floor supports all fixtures, where size permits, have been put on brackets.

Throughout, special attention has been given to sanitary precautions, to ease in cleaning, minimum maintenance, and above all—to promote the convalescence of the patient by providing quiet, comfortable, homelike surroundings.

Adequate hospitals, the collection of vital statistics, and the safeguarding of the water and milk supply should receive first consideration by the community on the theory that sickness is a community liability.—*Today's Business*.

HOSPITAL LIBRARY WANTS A. H. A. "TRANSACTIONS"

The Hospital Library and Service Bureau is attempting to complete its files of the Transactions of the American Hospital Association and what in earlier years was the Association of Hospital Superintendents. The bureau lacks volumes 4, 6, 7, 8, 15 and 18.

The bureau will deeply appreciate the kindness of any individuals or hospitals who may be willing to contribute these volumes to its files. The address of the bureau is 22 East Ontario Street, Chicago.

METHODS USED IN COLLECTING PAST-DUE HOSPITAL ACCOUNTS: A SYMPOSIUM

PERHAPS no subject is of more universal interest to hospital administrators than that of collecting accounts. It is well known that many hospitals have large annual deficits as the result of past-due accounts which cannot be collected from pay or part-pay patients. Some of these deficits run from 2 to 10 per cent of the total income from pay patients.

Because of the erroneous idea which many patients have that hospitals are or should be *per se* purely charitable organizations, they expect the hospital to treat them for little or no compensation. Therefore, without any consideration of the expense incurred in their care and without making inquiry as to the hospital's rates, many patients, when confronted with their account upon discharge, utter loud protests and do a great deal of shouting about the "exorbitant rates" of the hospital. Nearly every hospital is familiar with this type of patient. Instead of permitting such a patient to escape paying his lawful debt, as too many hospitals do, it is the duty of the institution, in fairness to its patients, to collect these accounts, even though drastic methods may often be necessary.

Tact Needed in Collecting Accounts

On the other hand, the emergency patient who enters the hospital for the first time and is unfamiliar with the costs entailed, is entitled to some consideration from the hospital. At least, it is only fair that the institution prepare the patient for the shock he may be subjected to, upon receiving his bill, by a tactful presentation of the service costs and the need for as prompt payment as possible. If, then, the patient is not well disposed toward the hospital, it is the hospital's duty to collect the account by means of methods commensurate with the patient's financial status.

Where a social service department exists, the hospital is relieved of much of the difficulty of collecting accounts. But for those who do not have such departments, collection of past-due accounts still remains one of the most perplexing problems. The methods used by several hospitals, picked at random, together with comments as to the practicability of their systems, are here given for the value they may have for hospitals which find the collection of accounts a harassing problem.

Methods Used By Lakeside Hospital

The system of handling the financial end of patient service at the Lakeside Hospital, Cleveland, Ohio, is briefly described by Mr. G. F. Gaylord, business agent of the hospital.

"The Lakeside Hospital requires pre-payment of a sum equivalent to two weeks' board and care, in the accommodation to be occupied, on the admission of all private patients to the hospital; emergency cases, of course, are not included in this rule. Such patients are either expected to pay their accounts in full by the time they leave the hospital or to make some satisfactory arrangement with us respecting future payment. In case the pre-payment made by private patients overpays the account, a refund is made when the patient leaves the hospital. Since we began a reasonable enforcement of these requirements we find a great reduction in the number of past-due accounts.

"All staff patients receive the prompt attention of our

social service department either before or immediately after admission to the hospital, and such recommendation is almost invariably accepted. If it is considered that a case requires very careful investigation, no definite recommendation is made, but it is indicated that such is held in abeyance, and in the event that the patient is discharged from the hospital before the definite recommendation is at hand, a statement is rendered at our regular (ward) rates and, possibly, a corrected statement is afterwards rendered by mail.

Hospital Council Helps Collect

"We write to debtors whose accounts have not been, or are not being, paid in accordance with their agreements, and if our letters which request payment or an explanation of the cause of delay, are either ignored or are unsatisfactorily answered, the accounts are turned over for collection to the collection department of the Cleveland Hospital Council, which collects for practically all of the hospitals of the city. The council collects by the same general methods as those employed by the ordinary collection agency, bringing action to obtain judgment in many cases; but in the event that its investigation discloses the debtors' circumstances to be such that our claims appear to impose hardship upon them, the collection of such accounts is held in abeyance until a reinvestigation by our social service department determines that the account should be collected, cancelled or reduced."

System of "Follow-up" Letters

The Jewish Hospital, Cincinnati, Ohio, collects its past-due accounts by a system of follow-up letters which prove satisfactory.

All patients entering the hospital are called upon to pay in advance, if they live out of the city or enter a part-pay ward. A resident of the city is trusted, because the doctor vouches for his patient, or the hospital has some other means of knowing his ability to pay. The admission card contains the name of the person who will pay the bill, so that weekly the account may be sent to him for payment. Otherwise, the bill is sent to the patient, who usually agrees to pay, upon leaving the hospital. One hour before he leaves, a final bill is sent to the room. The patient is always escorted to the entrance by a pupil nurse who directs him to the cashier for final settlement.

If the foregoing plans fail, the bookkeeper sends three statements, at intervals of two weeks, and if this method brings no response, a personal letter is sent by the superintendent reminding the patient that repeated statements have been sent and that if the account is not settled, it will be necessary to turn the account over for collection, to the hospital's attorney. This threat usually has the desired result. However, there are times when the account must be turned over to the attorney, who is always successful.

When a patient enters the hospital, he is asked whether he has ever been there before and, if he has, the card index of accounts is examined so that if in the past the patient has been delinquent the hospital can act accordingly.

Commenting on methods of collection, Mr. Louis C. Levy, superintendent of the hospital, says: "I would recommend that hospitals within every city and town get together and

exchange lists of bad accounts so that hospitals may learn if a certain patient who has applied for admission, is 'bad pay.' Merchants have such organizations, and it is expedient that hospitals should also protect themselves by this means."

Uses Letter Service System

The Christ Hospital, Cincinnati, Ohio, has a service system for the collection of past-due accounts used when other means of collection have failed, usually after two or three regular statements have been sent out on the regular hospital billheads. When no response has come from these notices, the system of letters is begun. If the first two bring no results, the third is sent registered. This third letter never fails of bringing some kind of reply.

Miss Alice P. Thatcher, superintendent of the hospital, says that the system has been more successful than any yet tried by the hospital. "It is useful," she says, "only when followed regularly and systematically. One letter should be sent each week and the third letter should, of course, be registered with request for a return receipt. When the system of letters fail, we give the account to a local collector."

The Deaconess Hospital, Cincinnati, sends monthly reminders to delinquent ex-patients. If no answer is received, after several such reminders have been sent, the account is turned over to a collector who is permitted to sue the obstinate ones.

Employs Woman Who Collects in Person

The City Hospital of Akron has a woman collector who follows up delinquent patients by personal calls. If the account is not collected before the sixth month it is turned over to the collection department of the Akron Merchants' Association. The reminder card, shown here, is of value in calling the debtor's attention to his promises.

Uses Red Lettered Stickers

Saint Luke's Hospital, Duluth, Minn., sends out statements of past-due accounts every two or three weeks. It also uses the system of red lettered stickers and a series of three form letters which were obtained from the Hart-

CITY HOSPITAL OF AKRON	
GENERAL SUPERINTENDENT A. E. HARDGROVE	DATE
SERVICES AS ENUMERATED BELOW	
ACCOUNTS PAYABLE	

CITY HOSPITAL OF AKRON MARKET AND ARCH STS. AKRON, OHIO	
.....192....	
M	
Permit us to remind you of your promise to make a payment on your account on We are depending on this in order to meet our own obligations.	

CITY HOSPITAL OF AKRON	
GENERAL SUPERINTENDENT A. E. HARDGROVE	DATE
We ask your attention to a balance of \$..... due on your account. A prompt payment will be appreciated by us.	
Yours very truly, THE CITY HOSPITAL OF AKRON.	

CITY HOSPITAL OF AKRON	
GENERAL SUPERINTENDENT	
To	
Having received no response to our previous notice asking you to settle a balance of \$..... due on account, we ask that you give this your immediate attention.	
Yours very truly, THE CITY HOSPITAL OF AKRON.	

CITY HOSPITAL OF AKRON	
GENERAL SUPERINTENDENT A. E. HARDGROVE	
Your account of \$..... remains unpaid. Unless you take care of this within the next five days we will be obliged to put it in the hands of our collectors.	
Yours very truly, THE CITY HOSPITAL OF AKRON.	

ford Hospital, Hartford, Conn. The third of these letters contains a threat of turning the account over to an attorney. This letter has been found very successful in bringing immediate replies.

Collector Not Allowed to Sue

Accounts considered uncollectable by direct efforts of the hospital, usually accounts on which nothing has been paid for six months or more, are, in some instances, given to a local collector. The collector is not permitted to garnishee or bring suit.

Dr. A. J. McRae, superintendent of the hospital, makes this comment on the system: "It is necessary to use judgment and care in the selection of the accounts to be given out for collection. A few accounts on which the collector has fallen down are given to the attorney for collection but an attempt to collect by bringing suit is not permitted. It has been my experience that after an account has been unpaid for a year its collection is practically hopeless and it might just as well be written off the hospital's books."

A hospital exhibit featuring women nurses and their work was conducted by women doctors of Chicago and neighboring vicinity at the Woman's World Fair vocational show which was held in Chicago at the headquarters of the American Furniture Mart from April 18-25.

DEVELOPING THE SMALL HOSPITAL MUSEUM

By F. P. McNAMARA, M.D., PATHOLOGIST, FINLEY HOSPITAL, DUBUQUE, IA.

AT THE beginning of the present century the movement to improve medical education was undertaken by the American Medical Association. It began by classifying the medical schools of the country, by pointing out their deficiencies and by indicating remedies to correct the same. The association, aided by other agencies, notably the General Education Board and the Carnegie Foundation, and with the active cooperation of many medical school authorities, has brought medical education in this country to its present high standard. The results of this work are evident in the marked advances in medical science during the past twenty years, in the present high standard of medical practice, and in the improved administration of our public health work.

With the general improvement of the practice of medi-

today the small hospitals have a clear conception of their status as it concerns the care of the acutely ill, the improvement of medical practice in their communities, the prevention of disease in the community as a whole, and the education of the public in regard to disease. Previous to the hospital standardization era many hospitals had only the most meager laboratory facilities. As well equipped laboratories were included in the minimum standard, they have developed very rapidly since 1917, though, as yet, their full possibilities have not been attained.

Functions of the Laboratory

The laboratory offers numerous ways by which the clinician can increase his knowledge of disease and it also can be made to serve the laity as a means of obtaining a rational knowledge of medical science. This article has to do with one activity of the laboratory, that is, the development of a museum by which the doctors may refresh old or obtain new knowledge of gross pathology and by which the public may be educated in regard to some of the characteristics of diseased conditions encountered in the body.

It is to be regretted that too often small hospital museums consist of six to a dozen bleached-out specimens in odd glass jars, fruit jars, or tin pails, sometimes half covered by a solution of formaldehyde and half by dust and cobwebs. The sight would be even more depressing, were it not for the encouraging fact that somebody realized at some time that the specimens were worth keeping. This creates the hope that with a little stimulation more thought will be given in small hospitals to the preservation of specimens illustrating some phase of morbid anatomy. The principal reasons why more attention has not been given to the development of the museums are the belief that a sufficient number of specimens will not be obtained to make it worth while, lack of knowledge as to how the specimens are properly preserved, and the cost of maintaining them.



Figure 1. Display of part of the museum specimens collected in two years.

cine, using the term in its broadest sense, it was only natural that there should also be a demand for improvement in the administration of hospitals, whether large or small. The desire often expressed by individuals was crystallized into definite action by the American College of Surgeons when it surveyed and classified our hospitals into acceptable, partly acceptable and non-acceptable groups, and established a minimum standard for acceptable hospitals. The beneficial results of this standardization program were at first apparent in the general desire of all hospital authorities to have their hospital on the approved list.

Continued Trend Toward Improvement

But merely to be on an accepted list or to come up to certain minimum standards certainly could not satisfy the directors of any modern hospital if they were of the right calibre, and now there is the determination to have their hospital just as good as, if not a little better than, the best. This determination is especially apparent in the smaller communities where hospital authorities are united in believing that their hospitals, whether of 100 bed or less, shall render just as good service to the sick and to the medical profession as can be given in hospitals of 500 or 1,000 beds. In other words, they believe that mere size or geographical location do not necessarily indicate better service.

Without going into further detail it can be said that

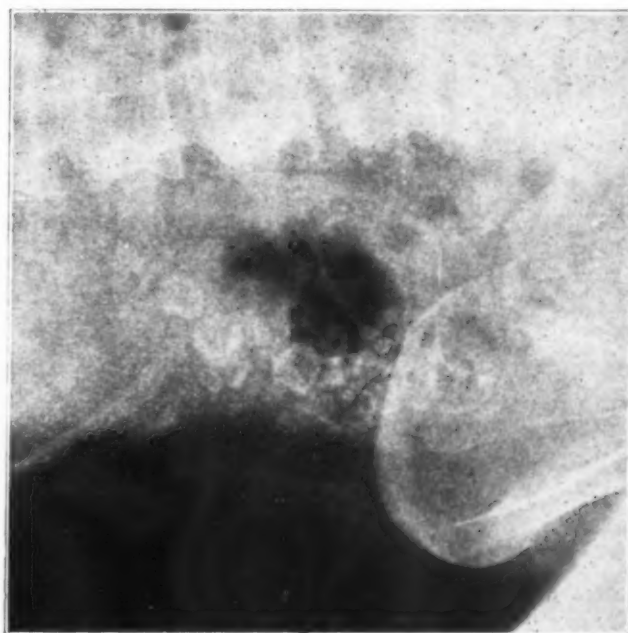


Figure 2. X-ray plate showing gall bladder filled with stones. (Compare with figure 3.)

When we first began our museum at Finley Hospital there was a great deal of pessimism in regard to its future success, but now all doubt has been dispelled. We feel that every hospital obtains a sufficient number of specimens well worth preserving. We have mounted more than 200 distinctly unusual specimens, some of which might well find a place in some large museum.

The accompanying illustration of a part of our collection (figure 1) will show what we have done in a little more than two years. Most of the specimens were obtained from the surgical service of our hospital; a small portion were obtained at autopsies. The latter, of course, should furnish most of the material, but until the medical profession as a whole realizes the value of autopsies, we can hope for little from this source.

If a specimen is worth preserving it should be preserved in as near the natural color as possible and mounted so as to best demonstrate the lesion present. The technique of preserving most specimens is not difficult and with a little study can be acquired by anyone familiar with the handling of organs and tissues.

Suggested Method of Preservation

Of course, as in other fields of human endeavor, the methods are unlimited, but for most of the material we have found the following procedure satisfactory:

1. All tissues are preserved as quickly as possible.
2. Before immersing in the fixing fluid all specimens are washed in physiological salt to remove any adherent blood.
3. The tissue is then covered with a 10 per cent formaldehyde solution. If the specimen is large, solid or encapsulated it should be sectioned. If cystic, the fixative can be injected into the cavity with a syringe. If there is no particular reason for preserving an entire organ an illustrative cross section is chosen. The fixing fluid may also be injected into the blood vessels of an organ before section and, if the organ is a vascular one, the deeper portions will be fixed. We have found the formaldehyde solution very satisfactory, although the following solution originally used at the Brady Memorial Laboratory of Yale University, as well as others, can be recommended. Brady Solution I is of advantage because the colors are retained, thereby alcohol is not needed to restore the colors.

Brady Solution I	
Carlsbad salts	300 gm.
Chloral hydrate.....	300 gm.
Formalin	300 c.c.
Water	10,000 c.c.

Carlsbad salts	
Potassium sulphate	4
Potassium nitrate	114
Sodium chloride	54
Sodium bicarbonate	60
Sodium sulphate	66

4. After the specimen is thoroughly fixed, the fixative is washed out in running water and the colors are brought back by immersing in alcohol. The time of immersion



Figure 3. Elongated gall bladder filled with gall stones.

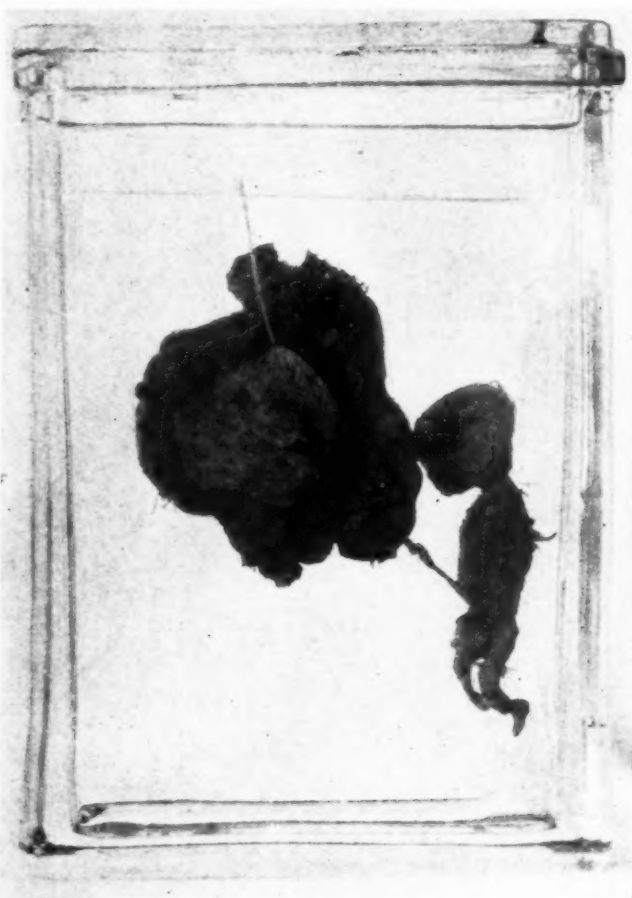


Figure 4. Tubo-abdominal pregnancy showing placenta in ruptured fallopian tube and foetus in abdominal cavity.

varies, but as a rule an hour or two is sufficient. The alcohol is then washed out in running water, excess water removed, and the specimen preserved in the permanent fluid and mounted. The preserving fluid we find satisfactory also originated at the Brady Memorial Laboratory.*

The formula is as follows:

Brady Solution II

Chloral hydrate	100 gms.
Sodium or potassium acetate	600 gm.
Glycerine	1,500 c.c.
Formalin	100 c.c.
Water	8,500 c.c.

The specimens are mounted in the several types of museum jars which can be obtained from laboratory supply houses. The following cement is recommended for sealing:

Trinidad Lake asphalt.....	1200 gm.
Boiled linseed oil.....	170 c.c.
Oil of amber.....	30 c.c.

Heat oil, add 400 gm. asphalt, boil $\frac{1}{2}$ hour and cool. Add remainder 200 gm. at a time, boiling $\frac{1}{2}$ hr. and cooling between additions. Boil until too firm to be indented with finger when cool.

The large items of expense of the museum will be the jars and solutions required. We have estimated the annual cost of our museum to be \$300 and \$350, which we believe is approximately correct for the average 100 bed hospital. The time consumed in the preparation and mounting of the specimens is estimated at about one-

*Those interested can obtain detailed information in regard to museum technique in the *Bulletins of the International Association of Medical Museums*, of which Maude F. Abbot, M.D., of Montreal, is the managing editor. The new edition of Mallory and Wrights "Pathological Technique," published by W. B. Saunders Co., Philadelphia, Pa., also contains much valuable material.

eighth of one person's working time.

It is the firm conviction of the writer that every well-conducted hospital of 100 beds has at hand definite means the full utilization of which will improve the practice of medicine in this country.

Among those means may be mentioned the clinico-pathologic conference at which the clinical and post-mortem findings are compared and discussed; the critical study of the other deaths in which there was no post-mortem examination; a critical monthly review of all cases in the hospital with an analysis of provisional and final diagnoses, the outcome, and constructive criticism of the treatment administered, and the gross study of pathological specimens shortly after operation, by the surgeons, as well as a demonstration of the specimens at the monthly staff meeting when the pathologist's final diagnoses are given and at which the microscopic sections are demonstrated. It is with the study of gross pathological specimens that we are concerned in this article.

Value to Physicians and Surgeons

Since the surgeon wants to study all specimens in as nearly their natural state as possible, it is obvious they should be so preserved as to retain their natural colors and be so mounted as to best illustrate the morbid condition present. As many diseases manifest themselves in variable manners in different patients, it is apparent that it is desirable to have as many illustrative specimens as possible so that the surgeon may become familiar with those variations. Thus we have the *raison d'être* of the museum and a very definite means by which a greater knowledge of gross pathology can be acquired by all physicians.

It is understood that the small hospital museum will never acquire sufficient material to illustrate all phases of morbid anatomy—that is the function of our university and government museums—yet we do feel that careful studies of the specimens obtained in a smaller hospital are well worth while and that they can supplement those made in the central museums, as a careful study of a few specimens is worth more than a cursory glance at a large number.

Nurses Offered Visual Instruction

Recently it has been recognized that a neglected duty of the medical profession has been the education of the public along rational lines of scientific medicine. We also believe that nurses graduating from even our best training schools often have irrational ideas of the manifestations of disease. As they have considerable prestige in regard to medicine with the laity, it is obvious that the nurse's medical education should not be solely along didactic lines.



Figure 5. Tuberculosis of the kidney showing cavitation.

The museum offers a method of demonstrating objectively the infinite variety of the manifestations of disease. To cite one example—how much easier it is for a nurse to grasp the essential differences between a benign and a malignant neoplasm by actually seeing the differences in the tissues obtained at operation or at autopsy than by obtaining only verbal descriptions? We have found that occasional visits to the museum have aided nurses in grasping many anatomical facts, both normal and pathological, which otherwise would have been very hazy in their minds. We believe that this is of distinct value to medicine, because the nurse gains a more definite conception of disease which will indirectly react to the benefit of the public.

This visual method of studying disease which can be used only where there is a well-developed hospital museum is further supplemented by a well-conducted x-ray department. By actually seeing the bones and joints, the heart beat, the lungs expand, the diaphragm move and the stomach filled and emptied, nurses learn anatomy and physiology in the most practical way.

Within the past few years, the medical profession came to a realization that the public was receiving through certain magazines, from the various cults, and the faddists of every kind, a great deal of false information which is detrimental to the health of the people of this country. One of the aims of these various agencies has been to discredit the methods of the medical profession, and undoubtedly these agencies have succeeded to a small extent. The realization of these facts has aroused the profession to combat the evil by various means such as lectures, health shows, the publication of magazines and pamphlets. In other words, they are combating false conceptions and pseudo-scientific ideas with scientific facts. One difficulty is that the vast majority of people have mental torpor which is apt to restrain whatever desires they may have to obtain new facts.

The museum, however, is an institution of visual instruction and we believe that it can be made to serve a very useful purpose as regards educating the laity on some of the basic facts of modern medicine. We are conscious, of course, of the necessity of restricting the character of the specimens shown to the public and that they must be demonstrated with the sole object of showing and visually explaining to laymen certain of the

fundamentals of the science of medicine. How certain selected specimens may serve to accomplish this purpose can be best illustrated by telling of certain incidents which have occurred in our laboratory.

One of our local physicians had a patient with a history and clinical findings of gallstones. He had advised the patient to have his gall bladder removed. The patient's wife heard of a medicine which would cause the stones to be passed through the rectum, without



Figure 6. Fibroma of ascending colon causing intussusception and intermittent obstruction of bowel.

pain. The patient took the medicine and he and his wife, chortling with glee, brought the stones to the physician. The latter knew the stones were the result of taking olive oil and, in order to impress the patient, sent him to me to see some real stones. He first warmed the "stones" gently in a teaspoon and showed him the oil which separated and then showed him real stones, pointing out the various differences. The patient on leaving said, "Well, I guess Dr. ——— knows what he is talking about after all."

Another patient was sent to the x-ray department for a picture of the gall bladder in order that he might see the film which showed a large number of stones. At that time there was in the city a blatantly advertised institution to which the patient went for advice concerning the diagnosis made in our hospital. The disciple, with the characteristic instincts of the cult exclaimed, "Impossible! who ever heard of gall stones being shown by x-ray?" The patient returned to us and, after being shown the x-ray plate (figure 2) of another patient and comparing with the museum specimen (figure 3), obtained a correct idea of the relative value of the physician's and cultist's diagnoses.

Such incidents illustrate how the museum can often be used, in specific instances, to correct false ideas. But of far more importance is the use of the museum material to demonstrate certain points during a lecture.

Through the efforts of the American Society for the Control of Cancer the public is being taught the danger signals of cancer. However simple the language used in a lecture may be to the physician, it is often very confusing to the average layman. One of the points stressed in most lectures on cancer is that it occurs locally, the curable stage, and then spreads by way of lymphatics and blood vessels to other organs when it is incurable. How much more striking than any word description is the demonstration of a primary cancer of the heel with metastasis in the lung and invasion of a blood vessel? This example illustrates how useful is the museum in emphasizing the points of a lecture. If it is necessary to do this very thing for medical students, is it not even more necessary to do it for laymen?

Gradual Change in Public Attitude

Ever since the beginning of our museum we have been impressed with a gradual change in the attitude of the general public toward the hospital. Previous to the hospital standardization program, this hospital, as most others in its class, was merely a "boarding house for sick people." With the improved methods in vogue since 1917 there has been a vague idea that the hospital, because it was on the accepted list, was doing fairly good work. With the development of our clinical laboratory and x-ray department as well as the publication of the "Finley Hospital Clinical Case Histories" the character

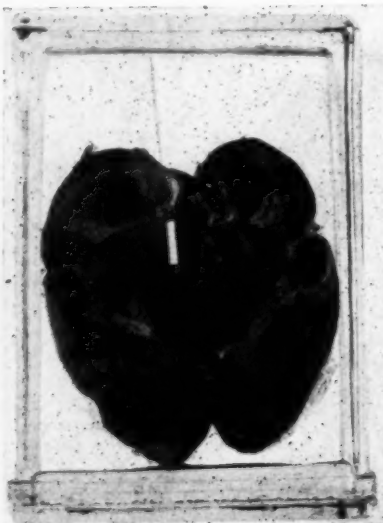


Figure 7. Hydronephrosis showing pressure atrophy of kidney.

of the work done became a little more tangible. However, it can be truthfully said that the medical staff, the trustees, and the general public had no clear conception of the high grade work being done in the hospital.

Laboratory Demonstrated on National Hospital Day

Last National Hospital Day we selected certain cases in which we could correlate the x-ray findings with the museum specimens, demonstrating as far as possible, the work done by the clinicians, the roentgenologist and the laboratory, before the diagnosis was made. Thus many of our physicians, all of our trustees, and other visitors interested in the hospital had tangible evidence of the character of the work being done here. We demonstrated the x-ray films of certain cases, then showed the specimens of tissues removed. The interest of the visiting public was so great that we were obliged to stop demonstrating from time to time so that the groups of persons would move on and make way for others.

There had been a marked and continued improvement during the previous five years but neither trustees nor staff, had ever fully grasped the fact until our demonstration on National Hospital Day. They realized then that we were taking advantage of the opportunities for self-improvement which present themselves in every one hundred bed hospital. If for no other reason we feel that this enhancement of the prestige of the hospital is of sufficient value to encourage the development of the museum.

The development of a museum in every one hundred bed hospital is not only possible but is well worth while. Aside from being a source of pleasure to the pathologist it will be a source of knowledge in gross pathology to physicians and nurses. It can be used, with certain restrictions, to demonstrate objectively to the general public some of the characteristics of disease in the body. It offers tangible evidence that the hospital is attempting to fulfill its functions of caring for the sick, of improving the practice of medicine and of preventing disease by securing the cooperation of the public by education.

STUDY BEING MADE OF PUBLIC HEALTH WORK OF GOVERNMENT

Mr. James A. Tobey, recently administrative secretary of the National Health Council, is now engaged, under the auspices of the Institute for Government Research, Washington, D. C., in making an intensive survey of the public health activities of the United States government. Preliminary studies have shown that there are at least twenty-six bureaus or other branches of the government which are directly or indirectly interested in some phase of public health. Sanitarians have long recognized the desirability of an effective coordination of these scattered functions and have frequently recommended that it be brought about. An endeavor will be made, with the advice of the most distinguished health workers and specialists in political science, to formulate a definite plan for correlation, providing for no new expansion, but simply a more effective and economical rearrangement of existing federal health activities. Students of government and of public health agree that the problem is a complex one, but it is hoped that a practical scheme may be ready for presentation to the Sixty-ninth Congress when it meets next December.

That which the droning world, chained to appearances, will not allow the realist to say in his own words, it will suffer him to say in proverbs without contradiction.—Emerson.

THE BENEFIT RE-SALE SHOP AS A MEANS OF RAISING HOSPITAL FUNDS

BY FRANK FOSTER, STATEN ISLAND, N. Y.

THERE is a shop on Staten Island called the Benefit Shop, that pays nothing for its stock of goods, sells it for real money and yet is not in business for profit. A certain department of this shop is known as the Treasure Shop, and in this division one frequently finds offered for sale pieces of beautiful old mahogany furniture, rare old pottery, brass candlesticks and genuine antiques of unusual value—all offered at prices that have little or no relation to their actual worth. The prices are always extremely low, yet this remarkable shop never advertises and makes no attempt to compete with other shops.

The Benefit Shop, of which the Treasure Shop is an integral part, exists for the purpose of raising money for several Staten Island hospitals, and has done this successfully year after year, over a long period. It is in charge of women who donate their services in rotation. Mrs. Smith, for instance, appraises on Mondays of each week, while Miss Jones does the selling for the day. The only exception to this rule is the general manager of the shop who is on duty every day and is paid a moderate salary for her work.

The Benefit Shop averages a net profit of six thousand dollars annually, and this money is evenly divided between two hospitals and an organization for social service. It is a much better method of raising funds for charitable purposes than the average hit or miss method of house to house solicitation and might well be applied to churches, missions, orphan asylums and similar institutions in need of financial support.

Of course all the goods in the Benefit Shop are second-hand. Usually it has a wide variety of second-hand shoes, neckties, underwear, suits, coats, cloaks, gowns, shawls, glasses and piece goods of every character. In the department reserved for the better goods, the Treasure Shop, occasionally a really handsome piece of furniture or an excellent household utensil in good condition is offered. They are all handled carefully and placed on sale at a price that insures a quick turnover.

Valuable Second-hand Goods Donated

The people who donate to the Benefit Shop know that they are helping a worth-while cause and, as a rule, furnish goods that, although used and a little worn, are still valuable. There are some exceptions to this rule, of course, but they are few and far between. When worthless goods are received—goods that are not suited to public sale—they are sold to the junkman, or, in case of rags

or clothing, sold to rug makers. But this thing does not often occur.

The customers who patronize this unusual little combination of business and charity are usually poor people who have to make every penny count, and this makes the benefit of the well-named Benefit Shop two-fold or twice blessed, like Portia's quality of mercy. Here is a shop where a man can buy a pair of shoes for twenty-five cents. Although they are not new shoes, if he can find a pair to fit him he is undoubtedly getting a great deal

for his money, since most of the shoes that find their way to the Benefit Shop were high-priced when they were new, anywhere from ten to eighteen dollars and, with a little mending here and there, might easily have served the original owner three to six months longer. As all articles are donated, the twenty-five cents is all pure profit except such portions of it as go to cover overhead and administration, and these items are always kept as low as possible.

Aside from the funds raised by the Benefit Shop in a systematic and business-like manner for worthy causes, it has its social value for its workers. The women who donate their

services, although they take turn about, are kept very busy when on duty. The whole experience promotes friendship, and is better, perhaps, than the conventional sewing circle, where there is always plenty of time for gossip. Another advantage of the Benefit Shop is that a sense of democracy and understanding is fostered because well-to-do women of refinement are brought together with men and women who have been less fortunate in life, on a basis that is quite different from that created by the dispensing of alms.

The Benefit Shop of Staten Island, unheralded and practically unknown outside its own community, is run entirely by women. There are no men connected with its management in any way.

Idea Is Good for Any Community

The question that now arises is—why not have benefit shops in other communities? There are many towns where several hospitals could pool their interests in such an enterprise to good advantage, just as the hospitals of Staten Island have done. Such a method of raising funds for charitable purposes is in no sense costly, for such a shop is very soon able to maintain itself and to realize profits. Moreover, the establishment of such a shop on the part of a hospital, or a group of hospitals need not interfere with other financial plans already in progress.

Selling, Not Begging, for Hospitals

THE hospitals of Staten Island have an unusual method of securing revenue through a little benefit re-sale shop which is manned entirely by women. It is run on the rotating plan of service whereby certain women donate their time to appraising and clerking each day of the week. The goods for sale are all second-hand and are all sold at moderate prices to facilitate quick turnover.

This shop is not only self-supporting but clears enough to pay the manager, the only person who receives a salary, and makes an annual net profit of over \$6,000.

The Treasure Shop, a department of the Benefit Shop, collects and sells rare pieces of furniture, pottery and brass.

THE WILLIAM H. MOODY MEMORIAL WARD, HALE HOSPITAL, HAVERHILL, MASS.

BY CHARLES D. WHITE, ARCHITECT, HAVERHILL, MASS.

THE William H. Moody ward of Hale Hospital, Haverhill, Mass., is a memorial erected to the memory of the late Justice William H. Moody, a resident of Haverhill, through the generosity of the citizens of that city. It is designed as a private patient building, planned for efficiency of service and ease of operation, and provisions have been made for an addition at some future time.

A dignified and artistic treatment of the building's exterior is created through the use of dark water-struck brick laid with the joint slightly raked. Brick quoins at the corners with brick panels under the second story windows give a pleasing tone to the walls. The elevations are enriched through the use of a warm colored artificial limestone for the water table and window trimmings.

A carriage drive gives ready access to the visitor's entrance which is at the grade level. This entrance opens on a reception hall having a terrazzo floor with mosaic border. The walls are painted with a warm shade of buff which extends up to the simple plaster cornice.

Adjoining the reception hall is the storage room and janitor's closet where wheel chairs are kept and all meters

light give an extensive view of the long corridor from the reception room.

Located on this floor are seven private rooms and a two-bed ward with a large solarium at the front and a smaller airing balcony at the rear. This balcony may also serve as a three-bed ward. The second floor is similarly designed with the addition of another private room over the reception room on the first floor.

Glass Enclosed Corridor

The corridor connecting to the old building is glass enclosed, thereby affording an ideal sitting room for wheel chair patients. The elevator is located in this corridor, being close enough for convenience and yet far enough to shut off noise from the private rooms. In the future, when a roof garden is to be added, it will be extended to the roof. Next to the elevator is the linen room with commodious shelves, drawers and closets for all supplies. This is an outside room and is, therefore, well lighted.

Doors opening on the corridor are large enough to allow wheeling of beds through, which permits the moving of patients with a minimum of effort and discomfort. A



View of the William H. Moody Ward, Haverhill, Mass.

and switchboards are conveniently installed. Separated from the entrance hall by a fireproof door is the ground floor corridor off which are private and utility rooms.

Main Floor on Second Story

Leading to the second which is the main floor of the building, because of the drop in grade, is a wide steel and marble staircase which opens on a reception room where patients and friends may meet. The walls of this room are painted a restful, elusive grey-blue, and the terrazzo floor has a mosaic border. Large glazed doors and a side-

six-foot linoleum insert in the terrazzo softens the noise of the corridor.

Nurse's Station Near to Diet Kitchen

Conveniently located in the corridor is the nurse's station alcove, which has a desk, telephone, annunciator and switches which control all corridor lights.

Just across the corridor from the nurse's station is the diet kitchen equipped with steam table, dumbwaiter and dish closet. The latter is sufficiently large to meet the demands of the floor. Its shelf facilities which provide for the maximum number of trays lighten the work in making

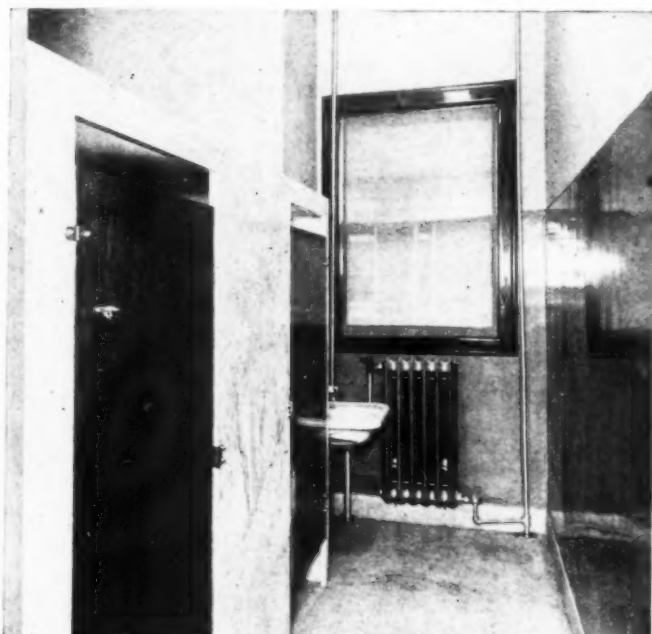
up diets. Beneath these shelves is the serving counter with cupboards and drawers nearby for silver and napkins. Grey enameled walls and terrazzo floor and base make the color scheme harmonious with the remainder of the building.

The utility room contains the usual copper slop hopper and sink. An arrangement which has proven both practical and beneficial to the nurses, consists of a small soapstone sink and wash tray with a three-foot drain board between. Adjoining this room is a closet for utility articles.

In the toilet room, the bathtub is set six inches above the floor and is tiled in at the back and ends, which arrangement facilitates the work of the nurse when bathing a patient.

Sun Parlors Have Fine View

The large sunparlors, which have an attractive view of the wooded hills and winding river, afford the patient

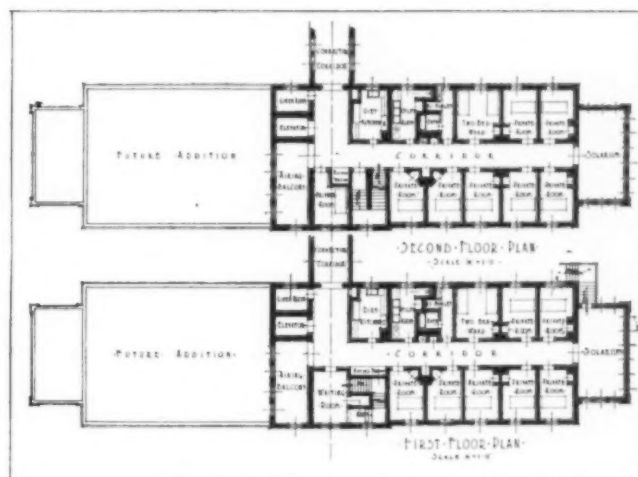


View of bathroom and toilet.

a beautiful outlook while enjoying fresh air and sunshine. The sunparlors are fully equipped with lights and bedside calls so that the patients can be wheeled in their beds to the sunparlors and still have all the conveniences



A typical private room.



First and second floor plans.

of a private room.

Set in a recess in the main corridor is the doctor's scrub lavatory with opal glass shelves for solution bottles. Here also is the medicine closet, which has forced exhaust in the ceiling. A porcelain sink and special bracketed opal glass shelves permit of easy and rapid cleaning. On the inside of the door is a cork carpet panel on which all instructions can be thumbtacked.

Rooms Ventilated by Forced Exhaust

Private rooms are artificially ventilated with exhaust inlet and outlet placed in the wardrobe closet, the door of which is two inches above the floor, thereby allowing an easy passage of air. This system of ventilation is used throughout the building. A vacuum return steam system which heats both buildings has proved satisfactory.

Walls Have Terrazzo Base

The rooms have a complete lighting system, with a center light controlled by a switch at the door, a bracket light with dimming attachment and a plug for a table light, bed pad or examination lamp. In addition, the bedside call with a light in the corridor and a signal at the nurses' station has been installed. Each room has a six-inch base and border of terrazzo with the remainder of the floor covered with a battleship linoleum cement.

Except for the doors, all woodwork ends six inches above the floor level. This space is covered with a terrazzo base



Another view of a private room.



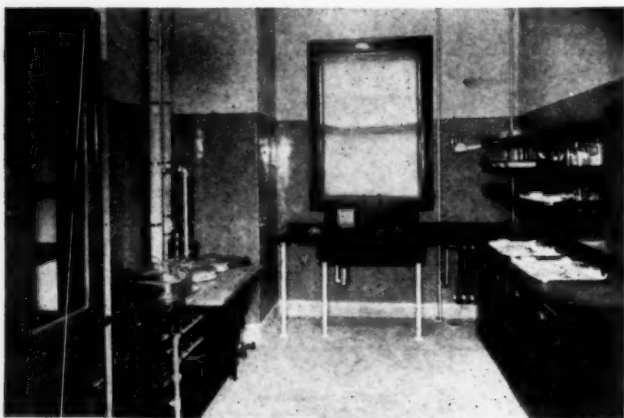
Typical corridor showing nurse's station.

which makes washing easy and keeps the walls from disfigurement. The bases of all utilities are set one inch



First floor sun parlor.

above the floor and the terrazzo flooring is formed in a cone under them, which arrangement prevents water from



One of the two diet kitchens.

working under and later oozing out in an untidy and unsanitary manner after the floor is dry.

NEW JERSEY GOVERNMENTS COOPERATE WITH HOSPITAL

Details have been made public of an agreement made between the Englewood Hospital of Englewood, N. J., and the local governments of twenty-two communities in the northern valley of New Jersey.

This arrangement between those boroughs and this hospital is said to be unprecedented and to mark the beginning of a new epoch in the relations between private hospitals and the municipal governing bodies of the towns they serve.

By the terms of this agreement each borough government from Northvale to Fairview will make up out of its official budget any deficit the hospital incurs by reason of caring for patients from that particular community. The amount that each town will place in its budget each year will be determined by a committee appointed by the governing bodies of the towns themselves.

All the boroughs in the hospital district have concurred in this arrangement because the cost to them is far less than were each town to maintain its own hospital facilities.

The amounts appropriated by each borough can under no circumstances be considered a contribution or a gift to the hospital. The appropriation is actually for the payment of the care of indigent patients and for the payment of the borough's share of the cost of keeping the hospital in readiness to serve, at all times, all the people of the borough. It might be termed the price that it is necessary for the borough to pay for the right of its people to demand and partake of hospital facilities.

Such an arrangement is a perfectly logical and legal way for any borough to provide hospital facilities for its people, and in most cases it is the only fair way.

In New Jersey under the law no borough can expend more than \$5,000 in the care of indigent patients, but there seems to be nothing to restrict a borough's purchasing the right to demand hospital services. It is stated that this \$5,000 restriction does not apply in this case. However, it has not been necessary as yet for any borough to exceed this amount.

"Two years ago under the leadership of Dwight W. Morrow and Seward Prosser, the residents of the Northern Valley put over the most successful hospital campaign ever conducted in this country," said Mr. Robert C. Post, president of Englewood Hospital, in explaining the new agreement, an agreement which he terms the most successful of its kind. "As a result of that campaign we are now enlarging the hospital to make it big enough to serve the entire population of the valley.

"The continuance of the past generous giving in support of the hospital, and the funds that will be derived through this new agreement promise to place the hospital in the very highest class."

In charge of the working details of the new agreement is a committee comprising Mayor C. W. Wright of Ridgefield; Mayor G. S. Mills of Leonia; Mayor Edward A. White of Fort Lee; Councilman Guy C. Foster of Tenafly and James W. Escher, treasurer of the Englewood Hospital. The towns and boroughs involved are Alpine, Bergenfield, Cliffside-Grantwood, Closter, Cresskill, Demarest, Dumont, Edgewater, Englewood, Englewood Cliffs, Fairview, Fort Lee, Harrington Park, Haworth, Leonia, Northvale, Norwood, Palisades Park, Ridgefield-Morsemeire and Tenafly.

The net increase in hospitals during the two years from 1923 to 1925 amounts to 540 hospitals with 58,204 beds. The greatest net gain is in hospitals under 25 beds.



Scenes in the nurses' home, St. Paul Sanitarium, Dallas, Texas: (upper left) dietetics laboratory; (upper right) class room; (center) Main entrance; (lower left) living room; (lower right) dining room.

NURSES' HOME OF ST. PAUL SANITARIUM, DALLAS, TEXAS

BY SISTER JULITTA, SISTERS OF CHARITY OF ST. VINCENT DE PAUL, ST. PAUL SANITARIUM, DALLAS, TEXAS.

AMONG the points of interest in hospital accomplishments in Dallas, Texas, is the new nurses' home is distinguished as one of the best equipped and artistic of nurses' homes in the southern states, was erected in 1922 by the Sisters of Charity of St. Vincent de Paul, who have charge of the sanitarium.

The building is an imposing four story structure in the form of an elongated "H" which plan affords an outside exposure for all rooms. The building has been constructed with a view toward the addition of another story above the fourth. At present, the building has a roof garden on top which is well lighted with arc lights. The main entrance is attractive with wide stone steps leading to the long porch which extends across the front of the building. The posterior of the building also contains a long porch.

Just inside the main entrance which opens onto second floor is the long hall which extends the length of the building. One is attracted by the large oak doors containing full length mirrors. The door to the right leads to the large living room which presents a comfortable home-like appearance with its simple yet artistic appointments. At either end of the room are davenport tables of carved oak, in one corner the grand piano, while a number of overstuffed chairs are grouped about the room. The soft shaded floor lamps as well as the pongee drapes add much to the artistic appearance of the room. To the right is the writing room the color scheme of which is apple green. The furniture is a pale green wicker, and the appointments of the room all harmonize with this predominant tint.

The library is located on the left. This is a large room with built-in cases containing French doors. At the end of the hall is the large assembly hall, with a seating capacity of 400, and a stage large enough to accommodate seventy-five persons. On this floor are also located the suite of rooms for the mother of the home.

Three Types of Class Rooms

At present the home has three types of class rooms. Class room A contains bookcase with different kinds of reference and textbooks for student use, oak desk and chair for instructor, blackboard and thirty-six new model desk chairs complete in every detail. Adjoining the class room is the practical demonstration room, dolls and infants with the necessary appliances to give any kind of class demonstration. Class room B seats thirty-six and contains the arm-desk chairs and blackboards. Class room C contains long table and chairs, blackboard skeleton and anatomical charts, dietetic laboratory, table, six gas plates and large gas range, blackboard, sink, and other details which make this room complete in equipment.

The third and four floors are arranged for nurses' sleeping quarters. There are eighty rooms in all, twenty being single. The rooms are quite similar with two built-in wardrobe closets, built-in dressing table, with overhead light, mirror and drawers. The bath rooms have white tile floors, walls enameled in white, and contain eighteen lavatories, six showers, with the same number of built-in tubs.

The dining room, gymnasium, trunk, wash and store rooms are located on first floor. The chemical and dietetic laboratories are also located on first floor. The dining room extends the length of the building to the south. It is a large room having a seating capacity of 200. The floor is of white tile. The food is conveyed from the hospital kitchen in covered containers and placed in the long steam table which has eight compartments. Service is cafeteria style. The equipment is completely modern in such details as the electric dishwasher, the thermo where ices are kept until ready for service and container for crushed ice for table use.

The nurses' home is particularly proud of its three pianos, two victrolas and radio outfit. Visitors are particularly impressed with the electrical fixtures of the nurses' home.

NOTED HOSPITAL ADMINISTRATOR DIES

The death of Dr. Charles D. Wilkins, superintendent of Ohio Valley Hospital, Wheeling, W. Va., occurred on March 31, after a long illness. Dr. Wilkins was in an eminent degree a representative man in the hospital world and his name was familiar to hospital administrators in every part of the eastern section of our country.

Doctor Wilkins, after graduating from Harvard Medical School in 1899, became an intern in the City Hospital, Worcester, Mass., serving in this capacity for one year. He then entered practice, specializing in surgery, and in a short time his ability was recognized and he was made a surgeon to out-patients at the Worcester City Hospital. In 1903 he was appointed assistant resident physician. The report of the superintendent of the hospital for the year 1903 mentions the appointment as follows: "The office of assistant resident physician was created in September and Dr. Charles D. Wilkins, one of our former house officers and lately surgeon to out-patients, was appointed to it. Doctor Wilkins' services have been eminently satisfactory and the interests of the institution have been better guarded than ever before."

In 1904 Dr. Wilkins resigned this position in order to accept another as first assistant physician at the Brattleboro Retreat, Brattleboro, Vt. He remained at the Retreat for several years, resigning to accept the superintendency of the City Hospital at Wilkesbarre, Pa. Serving in this position for another period of several years he received a flattering offer to become superintendent of the Charity Hospital, New Orleans, La. His work at this institution was also very highly commended. After two or three years a change in politics resulted in the resignation of the board of trustees and of Doctor Wilkins.

His next position was superintendent of Michael Reese Hospital, Chicago, Ill., where he remained until the outbreak of war. He received a commission as major in the medical corps but owing to ill health did not succeed in getting transferred to the front. At the conclusion of his war services he became superintendent of the Ohio Valley General Hospital at Wheeling, W. Va., where he faithfully served until his death.

HOSPITAL FACILITIES AND THE MEDICAL PROFESSION IN THE UNITED STATES*

BY HOMER F. SANGER, COUNCIL ON MEDICAL EDUCATION AND HOSPITALS, AMERICAN MEDICAL ASSOCIATION, CHICAGO, ILL.

THE growth of hospitals in America has been greater in quantity and in capacity than it has in effectiveness. Hospitals have been built by certain groups in communities—and oftentimes for certain groups—rather than by and for the whole community. They have been built by federal, state, county or city government as a matter of public charity; by churches and fraternal orders, not always without prejudice in favor of those who believe or who affiliate; by industries, usually for employees; by individual physicians, sometimes as an adjunct to their personal practice; by nurses and other laymen as a means of livelihood, and by independent local hospital associations, also sometimes restricted.

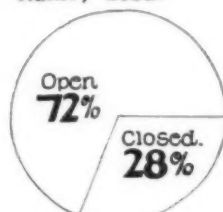
The information blank on which hospitals make routine reports to the Council on Medical Education and Hospitals

All have same privileges.
All ethical physicians.
All accredited physicians.
Open for medical cases, and to surgeons of known ability.
Open to women doctors only.
The "closed" policy hospitals answered:
Our private hospital.
Not open.
Only for consultation.
The patient becomes ours.
Other physicians not allowed.

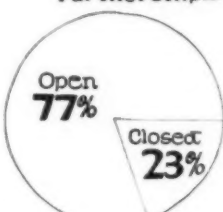
The answers from all the hospitals in six selected states were classified according to ownership or control to find out whether that has anything to do with its policy. The states selected for this analysis were Alabama, Colorado, Illinois, North Carolina, Pennsylvania and Virginia, and the results are given in Table 2.

OWNERSHIP OR CONTROL OF HOSPITALS IN RELATION TO THE OPEN POLICY

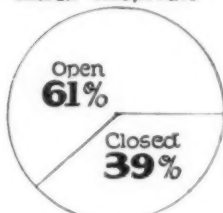
Independent Hospital Associations Mainly Local



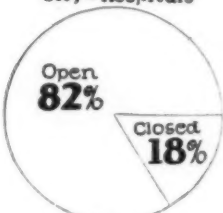
Individual and Partnership



Church-Hospitals



City-Hospitals



asks, along with other questions, "What is your policy regarding the use of the hospital by physicians not on either the attending or the consulting staff?" This question was answered by 2,867 general hospitals that are supposedly free to determine their own policy. State and federal hospitals were not counted. The 2,867 replies that were received were nearly all signed by the superintendent or medical director or owner of the hospital.

There were 2,034 additional hospitals that returned the questionnaire with other data, but made no answer to this particular question. Among the 2,867 hospitals that answered were 1,995 that are open for physicians not on the staff and 872 that are closed (Table 1). Counted among the closed are twenty-seven that welcome other physicians "when there is room," but do not say how often that is. Twenty are open to medical but not to surgical cases.

Among the characteristic answers of the "open" hospitals were:

All physicians welcome.

All legitimate doctors admitted.

TABLE 1.—Policy of General Hospitals Regarding Physicians Not on Attending or Consulting Staff.

State	Open		Closed		Silent on Open or Closed		Total	
	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds
Alabama	31	1,222	14	515	18	1,109	63	2,846
Arizona	16	506	7	241	11	462	34	1,209
Arkansas	24	899	13	770	13	595	50	2,264
California	170	8,553	67	7,393	144	8,597	381	24,543
Colorado	34	1,538	20	2,018	35	2,310	89	5,866
Connecticut	30	3,212	7	326	27	2,277	64	5,815
Delaware	...	...	...	...	4	300	4	300
Dist. of Col.	11	1,108	1	6	8	690	20	1,804
Florida	23	879	3	185	18	593	44	1,657
Georgia	39	1,675	7	779	21	1,252	67	3,706
Idaho	15	510	7	133	12	287	34	930
Illinois	131	9,652	28	5,933	143	12,770	302	28,355
Indiana	45	2,302	12	900	60	4,529	117	7,731
Iowa	71	3,038	16	729	63	2,169	150	5,936
Kansas	54	1,886	20	1,057	35	1,562	109	4,505
Kentucky	30	1,365	20	1,032	33	1,844	83	4,241
Louisiana	17	797	10	342	20	2,425	47	3,564
Maine	25	1,054	10	437	15	491	50	1,982
Maryland	19	1,598	8	2,600	22	1,418	49	5,616
Massachusetts	89	6,381	39	3,537	92	6,273	220	16,191
Michigan	73	3,814	33	3,468	78	4,889	184	12,171
Minnesota	55	2,369	44	4,082	80	4,665	179	11,116
Mississippi	19	638	6	238	20	782	45	1,658
Missouri	48	2,804	20	2,359	58	7,688	126	12,851
Montana	20	992	6	277	22	591	48	1,860
Nebraska	36	1,467	11	896	30	1,076	77	3,439
Nevada	11	226	3	92	1	3	15	321
New Hampshire	12	671	9	509	16	376	37	1,556
New Jersey	55	6,671	20	2,531	64	9,166	139	18,368
New Mexico	7	90	7	293	21	864	35	1,247
New York	114	10,542	77	15,849	233	20,746	424	47,137
North Carolina	39	2,143	28	1,204	42	1,587	109	4,934
North Dakota	16	702	3	68	10	233	29	1,003
Ohio	91	5,446	43	4,112	93	5,467	227	15,025
Oklahoma	48	1,322	9	411	22	676	79	2,409
Oregon	24	1,183	12	477	19	1,158	55	2,818
Pennsylvania	137	12,140	66	6,876	131	15,374	334	34,390
Rhode Island	6	236	7	1,086	8	786	21	2,108
South Carolina	15	617	5	130	16	1,083	36	1,830
South Dakota	17	644	3	154	11	709	31	1,507
Tennessee	33	2,381	13	1,923	35	1,992	81	6,296
Texas	69	3,545	52	2,608	59	2,607	180	8,760
Utah	18	682	2	197	8	129	28	1,008
Vermont	7	274	5	395	14	410	26	1,079
Virginia	17	1,048	15	1,402	33	1,508	65	2,958
Washington	41	2,076	13	875	34	1,590	88	4,541
West Virginia	18	1,008	14	745	15	802	47	2,555
Wisconsin	64	3,548	30	2,385	58	4,544	152	10,477
Wyoming	11	365	7	191	9	301	27	867
Totals	1,996	117,819	872	84,766	2,034	143,785	4,901	346,340

*Paper presented before the session of the American Conference on Hospital Service, held March 12, 1925, Chicago, Ill.

TABLE 2.—Ownership or Control of Hospitals in Relation to (a) Open and (b) Closed Policy.

	Independent Hospital Associations	Individual and Partnership	Church	County	City	Fraternal	Industrial	Total
(a) Open hospitals								
Alabama.....	10	17	1	0	2	1	0	31
Colorado.....	13	12	5	1	3	0	0	34
Illinois.....	43	44	27	6	9	2	0	131
North Carolina.....	24	9	3	0	3	0	0	39
Pennsylvania.....	97	25	10	2	3	0	0	137
Virginia.....	37	4	1	0	4	1	0	47
Total open.....	194	111	47	9	24	4	0	389
(b) Closed hospitals								
Alabama.....	2	7	4	0	1	0	0	14
Colorado.....	9	5	2	0	2	1	1	20
Illinois.....	10	12	6	3	0	0	1	28
North Carolina.....	12	12	3	0	0	0	1	28
Pennsylvania.....	35	12	14	2	1	2	0	66
Virginia.....	7	2	1	0	1	1	0	15
Total closed.....	78	46	30	5	5	4	3	171

The figures for these six states show for each type of ownership what percentage of its hospitals reported they are open, and these probably would fairly represent the entire country:

1. Independent associations, 72 per cent.
2. Individual and partnership, 77 per cent.
3. Church, 61 per cent.
4. City, 82 per cent.

Not only are hospitals restricted by the groups that build and support them, but also, sometimes with good reasons, by the physician or group of physicians who may control the professional policy of the hospital.

Liberality on the part of agencies that are building and maintaining hospitals is increasing, for the reason most frequently assigned that they need the support of the community. A growing liberality on the part of the staffs of hospitals toward other physicians is made possible by the increasing number of physicians who have been trained in hospital methods.

Five years ago, the council listed the physicians who were named on the staffs of hospitals in the United States, and they numbered more than 25,000. There were hospitals that did not send in their staff lists, and there were many physicians having hospital privileges who may not have been named on these official lists. Also, there are many more physicians affiliated with hospitals today than there were five years ago, as indicated by the increased number and capacity of general hospitals.

In New York City, with 8,769 physicians, 3,232, or 36.8 per cent, are affiliated with hospitals and in Cleveland, 29 per cent have affiliations.¹ In Chicago and its suburbs, 25.6 per cent of all physicians were named on the official lists of staff (Table 3) members that were submitted by the hospitals.

TABLE 3.—Physicians on Staffs of All Hospitals in Chicago (Including Evanston and Oak Park).

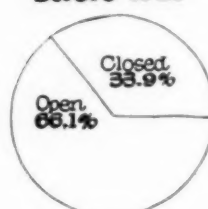
Physicians on Staffs of General Hospitals:		
On one staff.....	1,049	
On two staffs.....	207	
On three staffs.....	35	
On four staffs.....	7	
	1,298	
Physicians on Staffs of Special Hospitals:		
On one staff.....	84	
On two staffs.....	7	
	91	
Physicians on Staffs of Special and also General.....	115	
Total physicians reported on hospital staffs.....	1,504	
Total physicians in Chicago and suburbs.....	5,868	
Percentage listed on hospital staffs.....		25.6%

Obviously, there are many physicians accommodated by open hospitals whose names are not on these staff lists.

1. Lewinski-Corwin, E. H.: The Hospital Situation in Greater New York, 1924, p. 45.

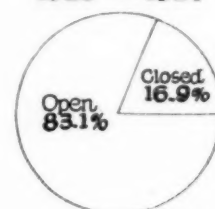
The PRESENT TENDENCY

Before 1920



Ratio 2:1

1920 — 1924



Ratio 5:1

	Before 1920		1920-1924	
	Open	Closed	Open	Closed
Replies by Hospitals	1617	795	378	77
Percentages	66.1	33.9	83.1	16.9

RATIO OPEN TO CLOSED 2 to 1

5 to 1

A canvass of all the physicians in Chicago probably would show a proportion having hospital affiliation equal to that of New York City.

Twenty-nine per cent of all physicians listed in the American Medical Directory for the state of New Jersey

TABLE 4.—The Present Tendency Indicated by General Hospitals Established During the Last Five Years.

State	1920		1921		1922		1923		1924		Total 1920-1924	
	Open	Closed	Open	Closed	Open	Closed	Open	Closed	Open	Closed	Open	Closed
Alabama.....	4	1	3	5	1	7	1	2	1	31	4	25
Arizona.....	1	1	1	1	1	1	1	1	1	3	1	4
Arkansas.....	4	1	1	1	1	1	1	1	1	6	1	8
California.....	11	3	6	3	9	3	9	4	4	1	39	14
Colorado.....	2	2	2	1	1	1	1	1	1	5	1	6
Connecticut.....	1	1	1	1	1	1	1	1	1	1	1	2
Delaware.....	1	1	1	1	1	1	1	1	1	2	1	2
District of Columbia.....	1	1	1	1	1	1	1	1	1	1	1	2
Florida.....	1	1	1	1	1	1	1	1	1	5	1	5
Georgia.....	4	1	4	3	1	1	1	1	1	12	3	15
Idaho.....	1	1	1	1	1	1	1	1	1	2	1	3
Illinois.....	4	1	4	4	4	6	4	4	22	1	23	1
Indiana.....	3	2	2	2	2	7	2	2	16	3	16	1
Iowa.....	6	3	1	1	1	1	1	1	12	3	15	1
Kansas.....	3	1	4	2	1	3	12	4	1	16	5	21
Kentucky.....	3	2	3	2	1	3	2	1	8	2	10	1
Louisiana.....	3	2	2	2	1	2	2	2	8	2	10	1
Maine.....	1	2	1	1	1	1	1	1	3	3	3	3
Maryland.....	1	1	1	1	1	1	1	1	1	1	1	2
Massachusetts.....	1	1	2	1	2	1	1	1	6	1	7	1
Michigan.....	4	3	1	1	4	1	1	1	13	1	14	1
Minnesota.....	1	1	4	1	1	1	1	1	11	2	13	1
Mississippi.....	3	1	1	1	2	1	1	1	6	1	7	1
Missouri.....	1	1	1	1	1	3	2	2	7	1	8	1
Montana.....	1	1	1	1	1	1	1	1	1	1	1	1
Nebraska.....	5	2	1	1	1	1	1	1	9	1	9	1
Nevada.....	1	1	1	1	1	1	1	1	1	1	1	1
New Hampshire.....	1	1	1	1	1	1	1	1	1	1	1	1
New Jersey.....	2	3	1	1	1	1	1	1	5	1	5	1
New Mexico.....	2	1	1	1	1	1	1	1	2	1	2	1
New York.....	4	1	1	1	1	1	1	1	9	3	12	1
North Carolina.....	2	1	2	2	1	2	1	1	1	9	6	15
North Dakota.....	1	1	1	1	1	1	1	1	1	1	1	1
Ohio.....	3	4	1	6	2	1	1	1	16	1	17	1
Oklahoma.....	5	3	5	4	1	1	1	1	18	1	18	1
Oregon.....	1	1	1	2	1	2	3	3	6	1	6	1
Pennsylvania.....	1	1	1	1	2	2	1	1	3	4	7	1
Rhode Island.....	1	1	1	1	1	1	1	1	2	2	2	1
South Carolina.....	2	2	1	1	1	1	1	1	6	1	7	1
South Dakota.....	2	2	1	1	1	1	1	1	5	1	5	1
Tennessee.....	1	4	1	2	1	1	1	1	8	1	9	1
Texas.....	5	1	6	6	2	5	2	2	1	24	7	31
Utah.....	1	1	1	1	1	1	1	1	4	1	4	1
Vermont.....	1	1	1	1	1	1	1	1	1	1	1	1
Virginia.....	2	1	2	1	1	1	1	1	4	2	6	1
Washington.....	3	1	1	1	1	1	1	1	6	1	6	1
West Virginia.....	1	1	1	1	1	1	1	1	5	1	6	1
Wisconsin.....	2	2	1	1	1	1	1	1	2	1	3	1
Wyoming.....	1	1	1	1	1	1	1	1	4	1	5	1
Totals.....	100	16	84	14	74	19	72	21	48	7	378	77
Percentages.....	86	14	86	14	80	20	77	23	87	13	83.1	16.9

are named on the staffs of the hospitals that reported from that state. In Wyoming, 17 per cent are on the staffs. In these percentages, allowance should be made for physicians who are listed in the directory, but who are not in active practice, or for various reasons not in position, to profit by hospital affiliation.

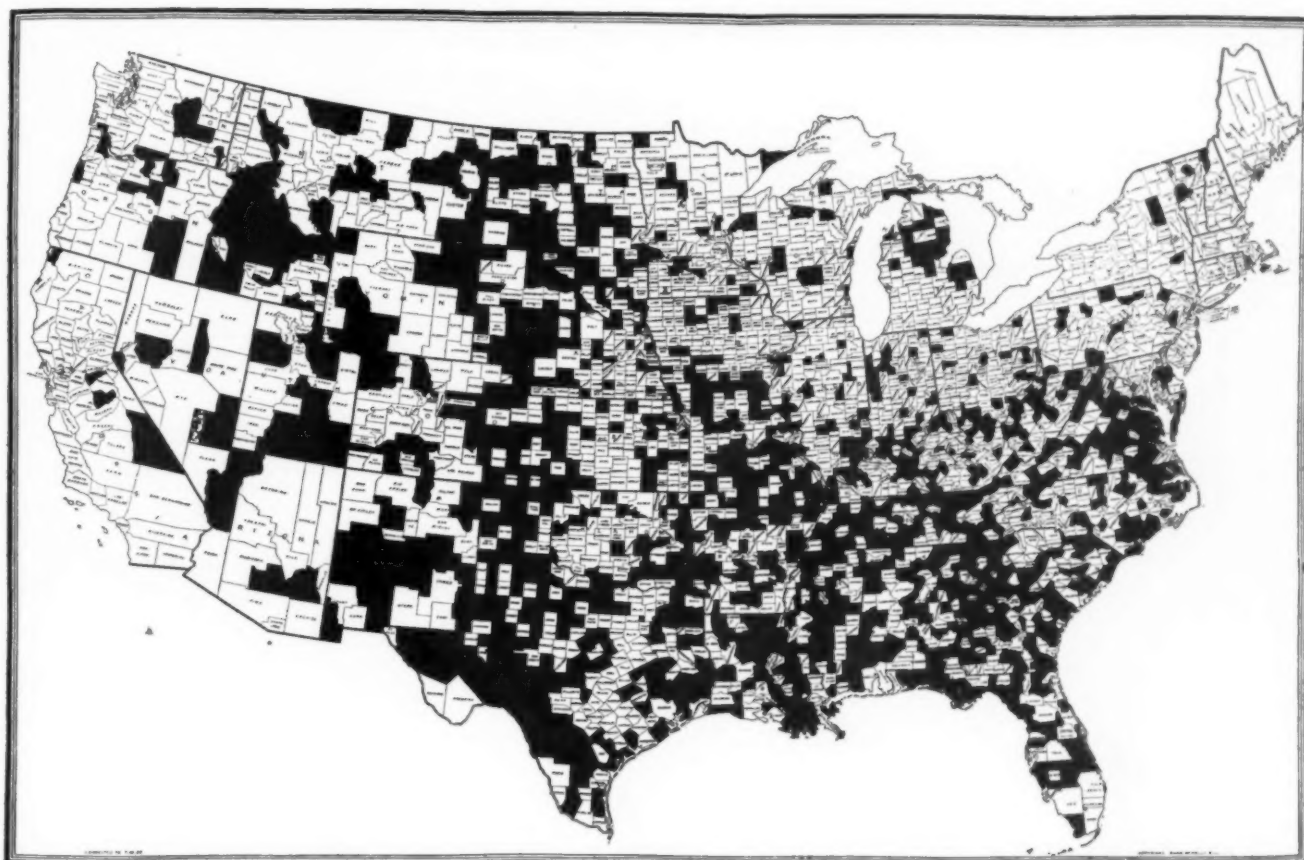


Chart showing in black the counties of the United States without hospitals.

Figures on the inconvenience of physicians and their patients occasioned by the restricted policy of hospitals are not available. However, there is a little sidelight on the sentiment of physicians in the state of Nebraska in the answers to certain questions² recently submitted to the 1,200 physicians of that rural state, as follows:

Replies of Physicians in Nebraska

Do you favor the open hospital with equal privileges to all? Yes, 148; no, 38.

Should ward beds be reserved for the members of the staff? Yes, 60; no, 129.

Why have a medical staff in a private hospital? No reason why, 89; necessary to efficiency, 90; no opinion, 69.

Are hospitals in rural districts proving a success? Yes, 212; no, 54.

Obviously one of the greatest possibilities for extending hospital connection to additional practitioners is in the new hospitals being established, and the building of new hospitals looms large when we know that there has been a net gain of more than 500 general hospitals in the last five years.

To put it differently, in 1920 there were 1,695 counties, or 56 per cent of all the counties without hospitals, as compared with 1,367, or 44.6 per cent of all the counties at present without hospitals (Table 6), a gain of 328 counties in five years. These 1,367 counties that have no hospitals within their borders have a total of 17,381 physicians, and a population of 17,677,254. There are 42,196 physicians in counties where all the hospitals are owned by individuals or partnerships.

Present Trend of Open and Closed Policy

To sound out the present trend of sentiment, a separate tabulation was made of the general hospitals that have

been established during the last five years. The results are summarized in Table 4.

TABLE 5.—Comparative Summary.

	Before 1920		1920-1924		Total	
	Open	Closed	Open	Closed	Open	Closed
Replies by hospitals....	1,617	795	378	77	1,995	872
Percentages.....	66.1	33.9	83.1	16.9	69.6	30.4
Ratio open to closed....	2 to 1		5 to 1		2½ to 1	

Of the 455 hospitals that were established in this five year period, 378 maintain the open policy and only seventy-seven, closed—a ratio of 5 to 1 as compared with a ratio of 2 to 1 for the period before 1920, as shown in Table 5.

In fact, the 100 general hospitals that were opened in 1924 show seven open to one closed. The tendency, therefore, is rapidly toward the establishing of more hospitals with open staffs.

One hospital worker in Colledio Ponte Noba, South America writes: "Just what my official position in our little hospital is is hard to define. I am the first and only nurse in this locality, which is more than one hundred miles from the nearest railroad and the only one in the interior of the entire state of Bahia. When our hospital is finished it will be totalled the Grace Memorial Hospital. I do everything from rolling bandages to acting as first assistant to the one doctor who had 14,750 consultations and treatments in the year 1924, and 1925 proves to be even a fuller year.

The hospitals for local or community use, which in 1923 numbered 6,009, have now increased to 6,428 with an increase in bed capacity of 30,530 or 7.6 per cent in the past two years. There have been gains in the hospital facilities of nearly 11 of the hospital agencies in the field.

—*Journal of the American Medical Association.*



THE INFORMATION DESK

LONG WINDOWS FOR ADEQUATE VENTILATION

The problem of window construction for the hospital is one that should command the attention of the superintendent. It is important that window heads be as close as possible to the ceiling. However, there is a tendency on the part of some architects to drop the window heads some distance below the ceiling, because of the more pleasing effect which this arrangement gives the interior of the room. But the necessity for ample ventilation in the hospital requires the placing of window heads as close as possible and not more than one foot below the ceiling. As the ceilings of hospitals are generally at least two feet higher than the ceiling in ordinary houses, and as the window sill should be low enough to allow the patient in bed to see out the window, it is necessary for the architect to adopt a much longer type of window than that used in ordinary work.

GET RID OF INFLAMMABLE FILMS

The Surgeon General of the U. S. Public Health Service, has issued general instructions to remove from the clinical record files as many of the used x-ray films of inflammable type as are not essential for record purposes. The storing of nitrocellulose films, especially when filed as a part of the clinical records, is, of course, well known to be a serious fire hazard and in conflict with the fire regulations of most cities. Boards of medical officers have been called in the various marine hospitals for the purpose. One of the larger institutions has eliminated approximately six hundred pounds of the old style used films from its records. The material has a small sales value. The use of fire-resisting films which are not more inflammable than ordinary paper, and the storage of which, therefore, presents no special problem, was introduced in all marine hospitals on July 1, 1924.

A REMINDER TO PATIENTS

The back of the statement of the Grace Hospital, Detroit, Mich., contains a reminder to patients of the hospital's upkeep as an appeal for prompt payment. The reminder headed, "An Explanation and a Request," reads: "The cost of running a hospital is very high. If you occupied a ward bed or one of the smaller private rooms, you did not pay the full cost of your stay in the hospital. The difference between your payment and the cost of your care is made up from endowment funds.

"In explanation of the high cost of hospital care, it may be stated that in addition to all the departments of a hotel, we are obliged to maintain an ambulance department, an x-ray department, and radio-therapy department, a surgical and operating department, a nurse

training school with trained nurse supervisors and instructors, a department of physiotherapy and hydrotherapy, a large suite of laboratories, a completely stocked drug store, an anesthetic department with a corps of anesthetists, a large group of resident medical interns and an attending staff, comprising many of the leading physicians, surgeons and specialists in the city.

"The equipment and personnel for many of these departments are highly technical, specialized and expensive. Notwithstanding the above, your hospital bill per day has been less than you could obtain board and room in a first-class hotel.

"BEFORE YOU LEAVE ASK FOR ONE OF OUR ANNUAL REPORTS. IT CONTAINS MANY PICTURES THAT MAY INTEREST YOU."

PROPER CLEANING FOR RUBBER FLOOR RUNNERS

One of our readers inquires how to clean rubber floor runners so that tracking on the wooden floors may be prevented. The complaint is made that floors where the rubber runners are used have to be refinished twice a year in order to be kept presentable.

Whether or not rubber will track on to the wooden floors depends on the methods of cleaning, as tracking is the result of improper cleaning methods. When rubber runners are cleaned on the floor with water it is difficult to prevent the water from seeping under the runner and discoloring the wood. Since this is the case, the runners should be lifted and cleaned outside the ward. This may save the floors to a certain extent, but wooden floors, no matter what sort of runner is used to protect them, require refinishing at least once a year.

DRAWING THE LINE BETWEEN PUBLICITY AND ADVERTISING

Inquiries are frequently made as to what extent a hospital may go in publicity work for its services, or if it is justifiable to advertise certain services. One reader recently inquired as to the advisability of advertising its physiotherapy department. The answer is that it is not ethical for a hospital to advertise a physiotherapy department as a special feature, as advertising as such does not meet with the approval of the American Hospital Association or the American Medical Association. Physiotherapy should be used in a hospital only as prescribed by a doctor. Therefore, such advertisement might be misleading to the public and might antagonize the other doctors of the community. However, it is not unethical to have publicity concerning the department in the daily newspapers as news items.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,

71 Willow Street,
Brooklyn, cN. Y.

CHANGING CONCEPTIONS OF SUPERVISION*

BY GRACE A. DAY, FORMERLY ASSISTANT PROFESSOR OF ELEMENTARY EDUCATION, TEACHERS' COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, N. Y.

EVEN before the recent movement toward greater democracy in all human relationships, it became evident that successful supervision in the field of education depended upon something much more fundamental than vested authority. Mere experience without scientific study was slowly teaching supervisors that their task was not so simple as the dictionary might lead us to believe. That time-honored authority says that supervision is the "act of overseeing; inspection; superintendence, oversight," and that to supervise is "to oversee for direction; to inspect with authority."

But the ultimate effect of this type of supervision upon schools, pupils and teachers proved to be generally disappointing and very frequently disastrous. More analytical and critical observation of school supervision began to take place. Something of a psychological study of this work is now revealing the causes of many of its past failures. Some fundamental principles are being discovered which underlie successful supervision in all fields of human activity, whether it be teaching, nursing, commerce and industry or other professions and occupations where supervisors are expected to achieve results through the instrumentality of other workers.

There is a new conception of the function of a supervisor. In the past, a supervisor of teachers, nurses or any other group of people was expected to plan and direct the work of the group. In other words the function of the supervisor was to do the thinking for the group. The members of the group were to do as they were directed by their supervisors, were mere followers without the rewards or satisfactions of complete thinking and living out one's own task. At present, this conception of supervision is rapidly giving way to one in which the supervisor becomes a leader of a very different type. We are coming into a larger respect for human personality than the world has hitherto put into practice. No individual is to be regarded merely as a means to an end no matter how worthy that end.

New Type of Supervisor Arises

Teachers are appointed to educate pupils, nurses are called to restore the health of patients but the individual welfare of each teacher, nurse or other worker is in itself a value not to be neglected by supervisors nor society at large. The supervisor, today, who may hope

to succeed must develop a supervisory technique which will enable him or her to release the personality of the individuals of the group whom he or she supervises, to develop their initiative and individuality and help each one to become an independent thinker and creative worker. Whereas obedience was the old watch-word, growth becomes the new. The function of the educational supervisor is to render expert service to the professional growth of teachers in response to their felt needs, and the function of any other supervisor is to render expert service to the professional or occupational growth of the group supervised, in response to their felt needs. The old type of authoritative supervision was focused upon mere immediate results in the way of tasks well done. The newer type of democratic or educative supervision is focused upon constantly increasing results in the form of greater power, skill and joy of achievement through the self-realization of every individual in the group supervised.

Supervision Must Stimulate Growth

The newer supervision believes that self-expression is a fundamental human hunger which, if given an outlet through the work of every individual, under inspiring leadership, increases the quality and often the quantity of the work. The older type of supervision made no special provision for the self-expression of those supervised, but the newer supervision provides every possible opportunity for it. The modern supervisor of nurses, for example, helps the nurse to develop and to express high ideals of her own rather than merely accepting those of the supervisor.

The newer supervision also recognizes the importance of the creative tendencies in human nature and gives each worker every opportunity to express his creative ability. A teacher or nurse is encouraged to discover or invent new and better ways of working than have yet been used.

The newer supervision has found that cooperative rather than authoritative methods develop the most enduring sense of responsibility. To share responsibility in proportion to the stage of growth which one has reached, is not only satisfying to the worker but because of this satisfaction, makes a better worker. It is important that the young worker shall as soon as possible feel the inspiration of sharing responsibility and then of carrying it independently, catching from her super-

*Reprinted by permission from the *Bulletin of the International Council of Nurses*.

visor the spiritual joy of the life of service.

The newer supervision knows that it cannot render the greatest service until the one supervised comes freely and fearlessly to the supervisor as a trusted professional friend who is able and willing at all times to help solve those problems which the worker has found in her way. The skillful supervisor begins by giving the help which is wanted even when it seems trivial, then if she has further suggestions to offer along other lines they are more eagerly received by an openminded co-worker. In this way the supervisor is planting seed in fertile soil, whereas the old way often began with criticisms and suggestions for which the worker felt no need and was not ready, which she often resented and did not use. No help, suggestion, or criticism offered by a supervisor can be considered successful unless it has stimulated new thinking which results in voluntary improvement in the work of those supervised. Without an inner change, a new disposition, no amount of change in external behavior means growth. Supervision fails unless it succeeds in stimulating growth. Another way of saying the same thing is this—no help, suggestion or criticism given by a supervisor can be counted wholly successful unless the one supervised enjoys receiving it, makes good use of it and finds satisfaction in so doing.

One very objective test of supervision is the amount of spontaneous or voluntary return which those supervised make to the supervisor for further help, suggestion or counsel. Improvement in the quality of the problems presented to the supervisor is also a test of the quality of supervision. If the problems continue to be trivial or on a low plane it is because the supervisor has failed to lead the way to higher levels.

The newer supervision establishes such a friendly and democratic relationship that those supervised freely analyze and criticize their own needs and weaknesses in the presence of the supervisor in order to receive the help or suggestions of the supervisor.

Supervisor and supervised must keep in mind the fact that theirs is a common goal, a partnership, a mutual success or failure. The supervisor cannot hold the supervised responsible for success. The two stand or fall together. Both are responsible for whatever success or failure comes to either one. The supervisor is peculiarly dependent upon the supervised because it is only through the supervised that the supervisor can achieve any results. Too often have supervisors failed to understand their dependence at this point.

The supervisor with a large vision shares her own source materials with those whom she supervises. Nothing is held in reserve in order to preserve the superiority of the supervisor. But as those supervised outgrow the need of the supervisor upon each higher level of growth, the ideal supervisor, through constant, intensive study is found capable of service upon still higher levels. No supervisor can ever afford to neglect her own growth. In order to meet the manifold demands which the new type of supervision places upon him or her, a supervisor must have had the highest possible training and a rich and successful experience in the work which he or she attempts to supervise, otherwise there will be only stones to give for bread. In addition, intensive and extensive courses in supervision are needed, including psychology, sociology and philosophy applied to the special field of supervision in question. All of this presupposes a keen intellect and a love of scholarship as well as a whole category of virtues which are too many to be enumerated.

However large the group to be supervised, the newer

methods regard the individual teacher, nurse or worker as the unit upon which supervision must concentrate. Individual differences are so varied and so complex that no group of workers, professional or otherwise can be supervised *en masse*. This does not mean that supervisors do not meet their co-workers in groups, sometimes in large groups, but it does mean that every individual's difference must be taken into account, and that group work must always be supplemented extensively by individual work if effective results are attained.

While it has perhaps been implied throughout this paper, it will not be amiss to say that supervision is spiritual leadership even more than it is technical guidance. The changing conceptions of supervision may use more scientific or more accurate ways and means of working but supervision has not yet come to the time when it can succeed without being an inspiration to those supervised, but it must be a genuine inspiration. No false note will carry weight in this new world of reality.

UNIVERSITY OF CHICAGO OFFERS SPECIAL SUMMER COURSE IN NURSING

During the summer quarter the University of Chicago will offer courses for nurses who wish more thorough study in the fundamental sciences and in problems of teaching and administration in schools of nursing. This is the first time that the University of Chicago has offered such a course which will be undertaken at the request of the Illinois League of Nursing Education. The courses in nursing will be directed by Miss Laura R. Logan, R.N., president, National League of Nursing Education and dean of the Illinois Training School for Nurses.

In order to begin the preparation of a large number of nurses who will be qualified to administer and teach in schools of nursing, and in order that schools may be prepared to meet the grading program of the National League of Nursing Education which will be well launched within the next two years, it is suggested that alumnae associations offer scholarships for the summer course.

The cost of the course is estimated at from \$200.00 to \$350.00 depending on whether the student enrolls for one term only or plans to remain for the quarter. In a large number of courses, credit will be given for the completion of one term's work.

NURSES' INSTITUTE ON TUBERCULOSIS TO BE HELD AT MINNEAPOLIS, JUNE 15-20

The Hennepin County Tuberculosis Association, Minneapolis, Minn., has joined with the extension division of the University of Minnesota in arranging a nurses' institute on tuberculosis to be held at that university during the week of June 15 to 20.

While this institute has been planned primarily for persons not already in the tuberculosis field, enrollment is open to all public health, institutional and private duty nurses. The institute sessions will dovetail with the sessions of the nursing section of the 21st annual meeting of the National Tuberculosis Association which is being held in Minneapolis during the same week.

CORRECTION

An error was made in the heading which appeared in column 2 of page 361 of the April issue which read "Columbia Alumnae Campaign for Home." It is the alumnae of the Presbyterian Hospital, New York, N. Y., who are conducting the campaign for a nurses' residence.

CONFERENCE OPENS PROGRAM FOR GRADING NURSING SCHOOLS

THE movement for the grading of nursing schools was given impetus by the first conference of the groups interested, held in New York, N. Y., March 4, 1925. The meeting was under the chairmanship of Dr. William Darrach, representing the American Medical Association. Each of the three national nursing organizations had two representatives. The other organizations represented were the American Medical Association, and the American Red Cross. The field of education was also represented by two delegates, one from the University of Buffalo, Buffalo, N. Y., and one from the Carnegie Foundation, Pittsburgh, Pa.

Movement Started a Decade Ago

Preliminary steps of the movement were outlined by Miss Isabel M. Stewart, a representative of the National League of Nursing Education. For the past ten years work was done leading up to the plan of 1923 which was endorsed by the three national nursing organizations, and several of the other organizations represented. The subcommittee of the American Hospital Association which was working on a similar problem united with the nursing committee, thus forming the joint committee to agree on standards for grading and to carry the plan into operation.

A budget of \$115,000 was prepared for a three-year period and an effort was made to interest other organizations and larger corporations in financing the plan. The nursing associations have contributed \$7,500 with the prospect of \$10,000 to be given very soon, and Mrs. Chester C. Bolton, Cleveland, Ohio, has agreed to underwrite the first year's expenses up to \$15,000.

Problems Involved in Grading

Miss Elizabeth Burgess, a member of the grading committee of the National League of Nursing Education, mentioned some of the questions under discussion by the committee, such as the qualifications of directors and inspectors, publicity, the system of grading to be adopted, method of securing data, and the points to be covered in the survey of schools, and the possibility of cooperating with other bodies, particularly the boards of nurse examiners in the different states. Definite recommendations were made on most of these points.

Dr. S. S. Goldwater, director, Mount Sinai Hospital, New York, N. Y., representing the American Hospital Association, renewed the promise of cooperation from that organization and directed attention to the problem of grading nursing schools, because of the different types of institutions and the different kinds of workers needed. For instance, he showed that public health nurses require a different standard of training from that of the bedside nurse.

On the other hand, Miss Katherine Tucker, representing the National Organizations for Public Health Nursing, said that her organization was chiefly interested in securing a good fundamental education for the nurse as a nurse and that she could see no real line of demarcation between the education needed for the general nurse and for the public health nurse.

Major Julia C. Stimson, representing the Army Nurse Corps, emphasized that grading was not the important thing, but rather the stimulation of schools to improve their standards. She said that the army school of nursing

would cooperate and that the federal institutions would be just as anxious as private institutions to meet the approved standards.

Dr. Samuel P. Capon, chancellor of the University of Buffalo, Buffalo, N. Y., warned against too much formalism in adopting a plan for classification. He would make standards simple and back them up by inspections. He believes that the functions of the profession should be defined before attempting to define those of the school.

An agreement was reached at the meeting to undertake the classifying of nursing schools as soon as possible. It was decided that the joint committee be composed of two representatives from each of the three nursing associations and that two be appointed from the other allied associations in addition to which the joint committee will appoint such representatives as it wishes from the general field of education and from the public. The representatives will be given power to act without referring matters to their respective associations, but the organizations concerned are to be kept in touch with what is taking place.

It was the opinion of the assembly that the director of the study should be a trained investigator, but not necessarily a doctor or nurse.

The scheme for grading was discussed tentatively, but no decision was reached.

It was suggested that when the joint committee is formed that it appoint a finance committee to handle this matter.

Discuss Effects of Plan on Small Schools

An interesting discussion was held on the probable effects of the proposed grading plan on the poorer nursing schools. An opinion was expressed that grading should not go the extreme where it would interfere with some of the smaller schools in the community and that the opportunities for training should not be limited. Representatives of nursing interests brought out that it was a mistake to consider nursing schools primarily as a means of helping the hospital. One representative suggested that instead of putting smaller schools out of business they might be combined to build up one good school in place of several poor ones. The possible limits for teaching schools were considered and a suggestion made that members of the constituent associations interest their boards, with the result that those schools that applied for grading would then be visited.

Dr. Malcolm T. MacEachern, American College of Surgeons, hospital activities, Chicago, Ill., made a plea for more definite efforts in reaching schools. He stressed that the success of the grading movement would depend largely on a good staff of surveyors, as people were tired of inspectors, but would welcome anyone who came to help and give new ideas about their work.

The committee from the National League of Nursing Education and the American Medical Association will continue until the joint committee is formed.

Ten nurses' training schools in the District of Columbia are now sending their preparatory students to a university for a portion of their work. Eight schools go to the George Washington University, two to Georgetown University. The National League of Nursing Education has been responsible for this new departure of the "central" school for nurses.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
798 Lexington Avenue, New York, N. Y.

DIET IN THE TREATMENT OF DIABETES

By LULU G. GRAVES, NEW YORK, N. Y.

FOR the past several years, the treatment of diabetes has been receiving more and more attention. Even before the discovery of insulin, students of medical therapeutics were devoting much time to the study of this disease. As a result, the methods of treatment have undergone many changes, most of which have been of great benefit to the patient, though much remains to be done before definite statements can be made about diabetes. All are agreed that this is a disease in which, for some reason, carbohydrate utilization in the body is impaired and glucose is excreted in excessive amounts in the urine. This is apparently due, in part at least, to a deficiency in the secretion of the islands of Langerhans.

Authorities differ somewhat as to methods of treatment, but there is general consensus of opinion as to principles. The first step is to determine the patient's tolerance and maintenance requirement. The caloric requirement must be met, as the body functions cannot be properly performed without the necessary fuel. If the protein requirement is not met the structure of the body will be weakened. This is the more serious because it may continue for some time without being noticed. If both carbohydrates and protein are insufficient, the patient's resistance is lowered and he is more susceptible to other diseases. If carbohydrate, protein and fat are not given proper proportions, other conditions, such as acidosis, may develop with serious results.

New Ideas on Diabetic Diets

Formerly, much attention was paid to carbohydrate content of food and comparatively little thought given to the protein and fat; recently, the importance of the latter has been recognized and both are given their proper attention in the prescription. A low protein diet tends to decrease basal metabolism, especially metabolism of protein. There is a strong conviction among students of diabetes that reduction in the rate of metabolism is beneficial to the diabetic patient. Two-thirds grams of protein per kilogram of body weight is sufficient to establish nitrogen balance. This amount is considered by some medical men as a minimum necessary for tissue replacement; others consider one gram of protein per kilogram of body weight a safe proportion and, in some instances, one and one-half grams per kilogram have been used. Since carbohydrates must be restricted, the caloric needs of the individual may be met by a liberal fat allowance. Fat furnishes to the body a maximum of energy and a minimum of glucose. Proportions used by some au-

thorities are as follows:

¹Woodyatt—1 gram glucose will metabolize 1.5 grams of the higher fatty acids.

²Banting—1 gram glucose will metabolize 1.3 grams of the higher fatty acids.

Wilder—1 gram glucose will metabolize 1.7 grams of the higher fatty acids.

Total glucose is estimated by totalling the carbohydrate, 58 per cent of the protein, and 10 per cent of the fat. The patient's tolerance is the amount he can use without glycosuria and hyperglycemia. Woodyatt emphasizes the importance of glucose, regardless of whether it is from carbohydrate, protein or fat and whether or not it is metabolized and in the urine. Allen believes that in addition to this the amount of carbohydrate, protein, fat and total calories are important, as all have a part in the metabolism and are involved when there is a deficiency in the body. Joslin's idea is to treat as diabetics all patients having sugar in the urine until it is proved they are not.

The increased interest and knowledge of this disease has necessitated a corresponding increase in interest and knowledge of dietotherapy.

Diet Control Most Important

"Diabetes mellitus can be successfully treated in the less severe form by a properly balanced diet; in the more severe forms by proper diet and by an adequate daily dosage of insulin." "Invaluable as insulin has proved itself to be in the treatment of diabetes during a febrile illness and after operations, diet control remains as yet our most important method of therapy . . . The modern method of treating diabetes is therefore seen to consist in much more than the mere employment of insulin. Essentially it consists in the adoption of a newer and more modern attitude toward the disease." Dietotherapy is no longer a mechanical following of standard diet lists. By applying a knowledge of chemical physiology to a knowledge of individual needs, we are enabled to give to a patient the food which will meet his physical requirement and keep the disease in check as far as possible.

1. Woodyatt, R. T., "Objects and Methods of Diet Adjustment in Diabetes"—*Arch. Int. Med.* 28: 125 (Aug.) 1921.

2. Campbell, W. R., "Dietetic Treatment of Diabetes Mellitus"—*Canadian M. A. J.* 13: 487 (July) 1923.

3. Insulin Committee of Toronto—"Insulin: Its Action and Therapeutic Value in Diabetes." *J. A. M. A.* 80: 25 (June 25) 1923.

4. Baehr, Geo., "Economy in Modern Methods in the Study and Treatment of Diabetes." *Mod. Hosp.*, Dec., 1924.



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Education of the patient is of great importance. When he makes his own urine tests, or, if need be, gives his own insulin injections, he sees readily the necessity of adhering to the diet prescribed. Provided he has a desire to live, together with reasonable intelligence, he will soon cease to feel sorry for himself because he cannot eat everything his friends do, and as his food habits become adjusted he will learn to enjoy the foods he is eating. At one time the majority of people who ate grapefruit thought that the addition of sugar was necessary, now the majority prefer the natural flavor. Many similar illustrations could be mentioned. Gradually we are learning to appreciate natural flavors in food and prefer them to the artificial flavors we get by the addition of spices or rich sauces in making highly seasoned dishes.

Patient Needs to Be Taught Food Habits

This principle may be followed to a much greater degree with diabetics. "Educate the patient" has almost become a slogan which has been no small factor in the great change which has come about in the treatment of diabetes. With a diet carefully planned to meet the specific needs of the individual, and the individual taught the reason why he needs this specific diet and what the injury to himself will be if he does not follow it, he will have but little dissatisfaction with a restricted diet. Except in the severe case, the diet is not necessarily a limited one. Our diabetic patients in wards of the hospital do not feel that they have less to eat than the other patients; in fact, not infrequently has some non-diabetic in the ward asked if he might have a tray like the diabetics, if he would pay extra for it.

Probably the most obvious and most simple feature of the diabetic diet, from the standpoint of the dietitian, is the use of soups and meats. There is less opportunity for variety in serving meats than there is in the serving of soups, vegetables, or salads. The kind of meat served is necessarily governed to a great extent by the conditions in the home or hospital, the cuts being governed largely by the budget and further by the time and facilities for preparation and serving. If tender cuts are used, they are sufficient unto themselves, for most purposes, with the customary methods of cooking, such as broiling, or roasting. If what are known as cheaper cuts are used, it is desirable to serve them as casserole dishes or some similar combination. In view of the fact that even the word "stew" is an anathema to nurses, doctors and others living at a hospital, it was surprising to find that the diabetic patients at Mount Sinai Hospital were partial to the stew we served them. The following recipe was used; 50 grams round steak chopped, 20 grams carrots cubed, 20 grams canned peas, 10 grams onion chopped; food value—protein 11 grams, fat 7 grams, carbohydrate 5 grams.

Variety of Meat Dishes in Diet

The delicate flavor of chicken and veal make them well adapted to serving with other materials, thus making it possible to use the meat cut from bony pieces, or from surplus portions, in salads, a *la king*, plain creamed chicken with mushrooms, or as casserole dishes. Combining chicken and veal with each other in any of these forms may help in utilizing available material. Variations of these salads are mentioned elsewhere in this discussion.

As a general thing, we expect the meat dishes to provide the largest percentage of the nutritive value in the menu, as they are high in both protein and fat. It naturally follows then that soups of meat stock would be cor-

respondingly low in nutritive value. The usual additions to soup, rice, macaroni, noodles, etc., are high in carbohydrate and therefore usually prohibited. Stock soups may be low in nutritive value, yet still have food value. In many instances they act as an appetizer, influencing a patient to eat the remainder of his meal, when he might not otherwise do so. They may serve also as a means of getting liquid into the diet, and of providing bulk.

Stock soups may be made more palatable without affecting their food value by the use of herbs and green vegetables which may or may not be strained before serving. Some of these are parsley, bay leaves, cloves, celery, tomato, cabbage or a bit of onion. Broth and strained tomato make a delicious tomato bouillon with equal quantities of broth and tomato, or varying proportions of each according to the prescription needs. If one is working for a high protein content gelatin will help in the proportion of fifteen grams, or two level tablespoons, of gelatin to one quart of soup. This, allowed to cool and thicken, gives an appetizing jellied bouillon. Gelatin used in the same way with other soups adds to the protein content without affecting the flavor.

Cream soups made of cream and strained vegetable or with the white sauce using a low calorie flour, is a good main dish for luncheon or supper.

The Vegetable Problem

A greater problem to the dietitian is the serving of vegetables. It is not always possible to obtain a variety of fresh vegetables in good condition in all seasons of the year and in all sections of the country; nor is it necessary. Fortunately, there are to be had in the market first class canned vegetables and fruits. Since the vegetables which are easily kept in their natural states, such as potato, parsnips, turnips, are not used to so great an extent for diabetics, one is more or less dependent upon canned vegetables and fruits for about half the year, unless one has access to city markets. In rural sections, however, one is more apt to have a garden and may therefore have the best of fresh vegetables in season and also have them in the best of condition for canning. Methods of canning and devices for facilitating the work have been improved to such an extent that ample provision may be made for the winter season with less work than formerly, either in the home or the institution.

In fact, many state and county hospitals have a system for doing this on a large scale. As the vegetables used for diabetics are chiefly those with less nutritive value, they afford an excellent medium for getting other food materials, notably fat, into the diet. They may be served as a vegetable with various sauces or as a salad with one of the several dressings commonly used. Some of the sauces which have a high nutritive value and add to the attractiveness and palatability are hollandaise, figaro, tomato, butter, cream and white sauce and any other that the dietitian may devise; all of these can be made without the excessive seasoning usually associated with sauces, yet have a good flavor given by using natural food materials, green pepper, pimento, onion, celery, olives, parsley and mushrooms. Cream sauce may be made of cream thickened with egg white, white sauce made of low calorie flour, which is now available, and used to make a creamed vegetable or as an escalloped dish by baking in the oven. Many vegetables, especially all members of the cabbage family, are adaptable to *au gratin* dishes, the grated cheese being a desirable addition to the diet.

In making salads a single vegetable may be used, or a combination of several vegetables, or a combination of vegetables and meats. Celery, peas, green peppers, pi-

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mento, asparagus, carrots and cabbage lend themselves particularly well to combinations with each other or with such forms of meat as chicken, veal, sweetbreads, canned salmon or tuna fish and many other forms of fish. Nuts and cheese may also be used in these combinations, thereby increasing the food value, if desired, in a pleasing way. In a low protein prescription these may furnish all the protein required.

The Use of Gelatine

Many of these combinations may be used with plain gelatin. This permits one to use as much or as little of the food material as necessary to meet the prescription. A portion of the vegetable, meat, or fruit which is too small to serve alone can be made into a satisfactory serving with the addition of gelatin.

A low carbohydrate prescription can be met by using vegetables, the five per cent vegetables being well adapted to use for salads, and a higher carbohydrate content provided by using fruits in these salads. The fat may be regulated at will by the salad dressings, a high fat requirement being served a regulation mayonnaise, cooked or French dressing, in which no sugar is used. These may be served plain, or with the exception of French dressing, may be mixed with whipped cream or sour cream. A low fat requirement may have the same dressings made with mineral oil. If the flavor of the mineral oil is objectionable, a bit of chopped pimento, parsley, onion, green pepper or other aromatic plants may be added to make a Russian, Spanish, thousand island, or any name one chooses to attach to the dressing. Here too, the amount served may be regulated. A portion of chicken, veal, hard cooked egg or fish may be cut finely and mixed with chopped celery, cucumber or tomato in season, to furnish just the desired amount, and served with much or little dressing. As previously mentioned, gelatin may be used to advantage in regulating the amount of food material. Molded, served on a lettuce leaf with a creamy salad dressing, very small amounts may be served in portions that are satisfying to both the eye and palate. In each instance the lettuce should be weighed and computed.

Fruit Need Not Be Neglected

By devices of this sort the diabetic need not be deprived of fruit in his diet. He may have the well known plain gelatins made with orange juice, lemon juice or wine, which are always popular, or these juices may be combined, all of them, or any two of them. Fruit cut in small pieces may be molded and served either with or without cream; the cream may be whipped or served plain, it may be folded into the mixture or put on top. The fruit may be mashed, plain gelatin solution added and, when partly solidified, it may be beaten until light and frothy in appearance, thus making a fruit sponge. This may be further varied by beating whipped cream into the mixture, making a bavarian cream; or beating egg white into it and serving with or without whipped cream.

A concrete example may not be amiss. The banana is chosen because it is not commonly considered a "diabetic fruit," though there is no real reason for prohibiting it. While it is high in carbohydrate, it weighs light and because of its strong flavor, a small piece may be used effectively. It is comparatively inexpensive and may be had in all seasons in all sections of the country. Thirty grams of banana—about one-third of a small sized banana—mashed with a fork and mixed with thirty grams—two tablespoons—of whipped cream makes a good sized serving, furnishing carbohydrate seven grams, fat twelve

grams, protein one gram. Five grams of chopped walnuts—one and one quarter whole nuts—may be added, increasing the nutritive value by carbohydrate five-tenths grams, fat three grams, protein one gram.

Another dessert may be made by using twenty grams of banana mashed, fifteen grams of cream whipped and molded in a quarter cup plain gelatin solution to which a few drops of lemon juice have been added. The size of this serving is equally satisfactory and it is a good dessert, the food value approximating carbohydrate five grams, fat six grams, protein one gram. Nuts may be added to this, as in the other, if one wishes to increase fat and protein. This proportion holds good with many other fruits, even of such different texture as strawberries; that is, when using gelatin the fruit may be reduced by one-third and the cream one-half, if the patient's prescription is low, and still make a satisfactory dessert. If the prescription is higher the fruit and cream may be adjusted to meet the requirements. The majority of fruits may be used in a diabetic diet simply by determining the amount of fruit, cream and other ingredients to be used, thereby keeping within the prescription. Other fruits that may be used in the diet in more generous amounts are rhubarb, cranberries and gooseberries. These may have the acid partially neutralized by bicarbonate of soda and, if still too sour to be palatable saccharin may be added.

Custards May Be Used

Other desserts of value in the diabetic diet are custards made of cream and egg and flavored with fruit juice or fruit juice flavors. These may be either boiled or baked. If one does not wish to use pure cream, it may be diluted with water. If milk is permissible, the regulation custard may be served, using saccharin if one desires, either as a plain custard or as a sauce poured over a small serving of fruit.

Ice cream is more of a problem to serve to a diabetic, but is always welcomed. It can be made of pure cream, flavored, or with cream which has been whipped, or of a custard such as mentioned above. Saccharin may be added, but an appetizing frozen dessert can be made without it. 'Dr. Downey tells us that gelatin in ice cream is an advantage. As these desserts can be made at any time and are not affected by standing in a cool place for several hours, or even over night, their use may help to even up the day's work. They may sound formidable for use in a calculated diet, but after one has a recipe worked out, it is no more trouble to use a combination of these food materials than it is to use others. With the tables and devices for calculation which are now available, this difficulty of "weighed diets" has been much reduced. One does not presume to say that they are yet easy to accomplish, from the standpoint of the dietitian, but the gratifying results obtained by individual treatment more than compensate for the additional work.

Since there are now on the market about three or four diabetic flours safe for use, the problem of the bread substitute is not so great. A gluten cereal which is very low in carbohydrate is obtainable. Besides furnishing a cereal for diabetics, it affords another opportunity for getting fat in the form of cream into the diet. A starch-free macaroni is welcomed particularly by Italian and Jewish patients.

While we know the last word has not been spoken in regard to diabetes, knowledge of the disease and facilities

1. Downey, Thos. B. "The Place of Edible Gelatine in General and Special Diets." *Mod. Hosp.* 24: 65, Jan., 1925.

JELL-O

WHEN you prepare Jell-O for large numbers it will be more convenient and economical if you have on hand the Institutional Size Package. This large Jell-O box makes 4 quarts of Jell-O, which will serve 40 to 50 persons according to the size of the portion. For children, better count on serving only 40, for they will all want big helpings.

THE JELL-O COMPANY, Inc.
LE ROY, N. Y.

Canadian Offices and Factory, Bridgeburg, Ontario



America's most famous dessert

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for treatment have advanced sufficiently to give the diabetic hope and courage. One very important point of improvement has been the instruction of the patient in caring for himself and his realization of his own responsibility. With intelligent use of insulin, when necessary, he should be able to utilize a diet liberal enough to permit of his living a comfortable life. Intelligent use of insulin cannot be too much emphasized. Joslin says: "Insulin is a remedy primarily for the wise and not for the foolish, be they patients or doctors. Every one knows it requires brains to live long with diabetes, but to use insulin successfully requires more brains."

The following recipes are for six servings. All measurements are level. Since so small a percentage of protein and carbohydrate of mushrooms is utilizable by the body, their food value has been ignored. The author will be glad to furnish additional recipes on request. Abbreviations used are as follows:

c—cup
t—tablespoon
tsp—teaspoon
gr—grain
prot—protein
carb—carbohydrate
cal—calories

Cauliflower Soup

	grams	Prot.	Fat	Carb.	Cal.
5/8 c. cauliflower puree.....	150	3	1	6	..
3/4 c. strained tomatoes.....	150	2	..	6	..
1 1/2 c. meat stock, fat free.....					
1 tsp. salt.....					
1/16 tsp. pepper.....					
total	5	1	12	77	
one serving	1	..	2	13	

Heat all ingredients together to boiling and serve.

Braised Celery with Nuts

	grams	Prot.	Fat	Carb.	Cal.
3 c. celery cooked in meat stock and cut in one inch pieces.....	300	3	..	10	..
2 t. butter.....	20	..	17	..	..
1/4 c. walnuts broken in pieces.....	30	6	19	4	..
1/2 tsp. salt.....					
total	9	36	14	416	
one serving	1.5	6	2	69	

Melt butter in a pan, add celery and nuts, stir until celery begins to brown. Season and serve.

Stuffed Carrots

	grams	Prot.	Fat	Carb.	Cal.
6 medium size carrots.....	600	7	2	56	..
2 hard cooked eggs.....	100	13	10.5	..	..
2 t. butter melted.....	20	..	17	..	..
1/4 c. cooked mushrooms chopped.....					
1/2 tsp. salt.....					
total	20	29.5	56	569.5	
one serving	3	5	9	95	

Wash, scrape and cut the carrots in half lengthwise. Drop into boiling salted water, cover and cook until tender. Drain and cool. Scoop out the center, leaving a boat-shaped shell. Mash the scooped-out carrot with a fork, together with hard cooked eggs. Add melted butter, mushrooms, salt and mix well. Fill carrot shells with mixture and bake in moderate oven until heated through—about ten minutes. Serve.

Fish in Tomato Jelly

	grams	Prot.	Fat	Carb.	Cal.
1 t. gelatine.....	7	6	..	..	..
3/4 c. cold water.....	..	..	..	..	..
3/4 c. hot water.....	..	..	..	..	..
1/2 tsp. salt.....	..	..	..	..	..
1/2 tsp. whole mixed spices.....	..	..	..	..	..
3/4 c. strained tomatoes.....	150	2	..	6	..
2 t. vinegar.....	..	..	..	..	..
1 1/2 c. canned salmon flaked.....	240	51	29	..	..
1/4 c. chopped celery.....	30	..	..	1	..
1/4 c. chopped green pepper.....	25	..	..	1	..
total	59	29	8	529	
one serving	10	5	1	88	

Soak gelatine in cold water five minutes. Add salt and spices to hot water and boil one minute. Dissolve gelatine in hot liquid. Strain into tomatoes and stir in vinegar. Chill until almost set, then stir in fish, celery and green pepper. Mold and chill until firm. Serve on lettuce leaf with or without a salad dressing.

Cooked Salad Dressing

	grams	Prot.	Fat	Carb.	Cal.
1 tsp. mustard.....	2	..	..	..	..
1 tsp. salt.....	..	..	..	..	..
1/16 tsp. pepper.....	..	..	..	..	..
3/4 c. boiling water.....	..	..	..	..	..
3/4 t. butter.....	10	..	8.5	..	..
1 gr. saccharin.....	..	..	..	..	..
1 tsp. gelatine.....	2.5	2	..	..	..

1. Joslin, E. P. "Treatment of Diabetes Mellitus." M. D. M. A., p. 39.
2. Bailey, E. H. S., "Food Products, Their Source, Chemistry and Use." p. 300.

4 tsp. cold water.....	..	..	..	..
1 egg well beaten.....	50	7	5	..
1/4 c. vinegar.....	..	..	..	..
total	9	13.5	..	157.5
one tablespoon	0.4	0.7	..	8

Rub mustard, salt and pepper to a smooth paste with one tablespoon of hot water, then stir in rest of hot water, butter and saccharin. Heat to boiling. Soak gelatine in cold water three minutes and dissolve in hot liquid. Stir hot liquid slowly into beaten egg. Return to stove and heat over hot water until mixture begins to thicken, stirring all the time. Remove from stove, stir in vinegar, pour into cold bowl and set aside to cool and thicken.

Winter Salad

	grams	Prot.	Fat	Carb.	Cal.
2 tsp. gelatine.....	4.5	4	..	..	..
1/4 c. cold water.....	..	..	..	..	..
1/4 c. boiling water.....	..	..	..	..	..
1/2 tsp. salt.....	..	..	..	..	..
1/4 c. vinegar.....	..	..	..	..	..
1 1/2 c. grated cheese.....	150	43	54	..	..
1/2 c. chopped olives.....	70	1	19	8	..
1/2 c. chopped celery.....	60	1	..	2	..
1/2 c. chopped green pepper.....	25	..	..	1	..
1/3 c. cream whipped.....	75	2	30	2	..
total	51	103	13	1183	
one serving	8.5	17	2	197	

Soak gelatine in cold water and dissolve in boiling water. Add salt and vinegar and set aside to chill. When nearly set, beat until frothy and fold in cheese, olives, celery, pepper and whipped cream. Turn into molds and chill until firm. Serve on shredded lettuce or garnished with parsley.

PHILADELPHIA DIETITIANS MEET

The Philadelphia Dietitians' Association held their March meeting at the Pennsylvania Hospital the evening of the 26th at eight o'clock. After a short business meeting, five nurses, representing as many foreign countries, gave ten minute talks on diet in their respective countries, as well as their opinion of diet in this country. Belgium, Russia, Brazil, Poland and Austria were represented.

It seemed to be the general opinion of our foreign students that in America we do not use soup often enough and that our meals, as a whole, are not as heavy as theirs. especially when we consider the fact that they have more meals than we. While in America we think we use too much meat and fish, yet they use even more. These students aver that after a time they prefer our meals.

MINNESOTA DIETITIANS DINNER GUESTS OF MARKET HOUSE

The Minnesota Association of Hospital Dietitians held its monthly meeting March 9 at Millard Hall, University of Minnesota.

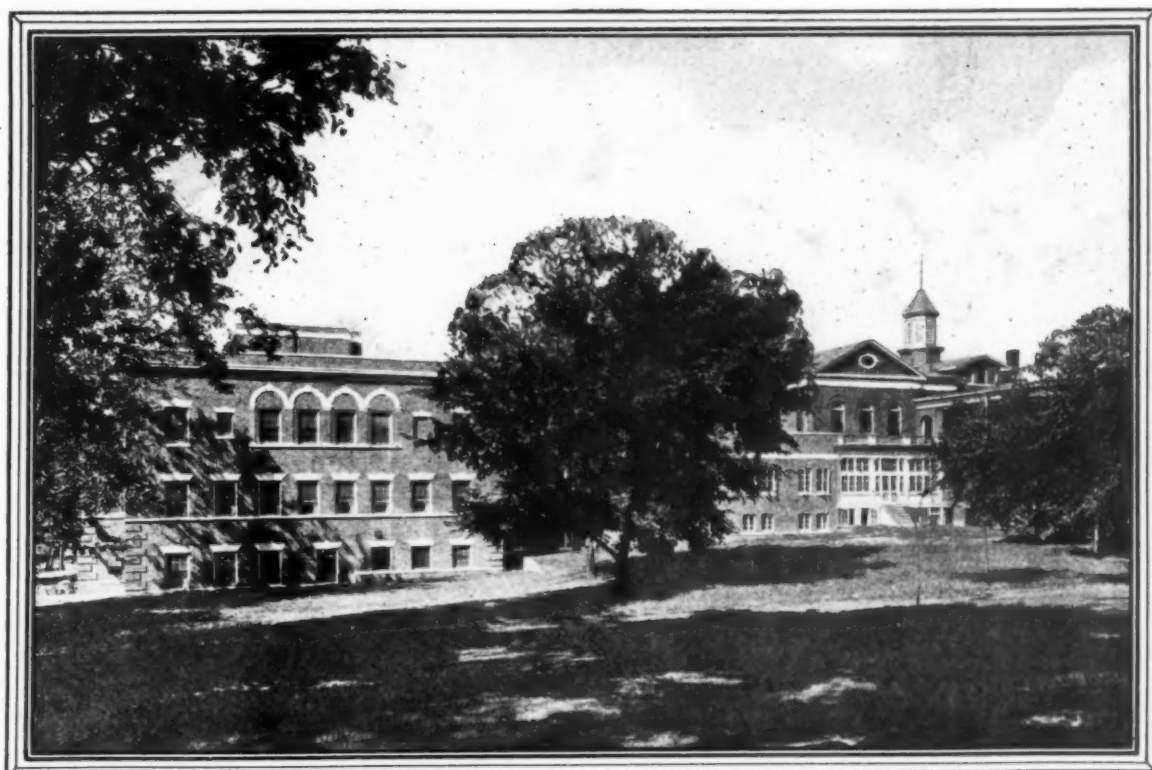
Dr. Archie Beard, University of Minnesota Medical School, Minneapolis, spoke on "Diabetes"; Miss Florence Smith, St. Marys Hospital, Rochester, Minn., spoke on "The Education of the Patient"; and Miss Edna Zavitz, Northern Pacific Hospital, St. Paul, spoke on "Special Diabetic Foods."

The dietitians were dinner guests of the Witt Market House. Mr. John S. Taylor, supervisor of personnel, spoke on "Characteristics of Buying and Selling," Mr. L. R. Witt on "Problems of Interest to the Dietitian and the Meat Dealer with Relation to the Institution." Following the meeting those present were entertained at the Orpheum Theatre.

DISTRICT OF COLUMBIA OFFICERS NAMED

Mrs. Genevieve F. Long, Walter Reed General Hospital, Washington, D. C., was chosen president of the Dietitians Association of the District of Columbia at the last monthly meeting of the association. Miss Rowena Roberts, Sibley Hospital, was chosen vice-president; Miss Grace Hunter, Walter Reed Hospital, secretary; and Miss Ruth Huckins, St. Elizabeth Hospital, treasurer.

(News Items Continued on page 482)



THE NEW UNIVERSITY OF MISSOURI HOSPITAL, COLUMBIA, MO., IS CRANE EQUIPPED. JAMIESON AND SPEARL, ARCHITECTS. CHAS. QUINN, PLUMBING CONTRACTOR. EICHLER HEATING CO., HEATING CONTRACTORS

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Crane Surgeon's Wash-up Sink

FIRE PREVENTION DEPARTMENT

Conducted by W. M. Krieger, Engineer,
209 West Jackson Boulevard, Chicago, Ill.

HOW FIRE INSURANCE RATES ARE DETERMINED

NOT in a boastful spirit but with deep satisfaction it may be stated that no business has played a larger or more generous part in the economic development of the United States than stock fire insurance, and ever since coordination for the purpose of rating was accorded public approval and given widespread legislative endorsement, achievements in safeguarding America against fire have been successful.

It is to the public's interest to pay a fair rate for fire insurance and to get the best possible indemnity—that which is as nearly certain as human foresight can make it. Poor or uncertain insurance is worse than none at all. This article, therefore, is specific in its references to "stock" fire insurance companies, which are those with paid-in capital stock, adequate reserves (required by the laws of the several states) and surplus accumulations held to make your indemnity the more certain—the companies that are regulated by the most rigid laws, whose standards of solvency are the highest and whose measure of security for your protection under all conditions is the greatest.

Modern Insurance Not a Monopoly

The modern system of fire insurance rating, into which the loss experience on 95 per cent of the insured property of the country is now gradually being injected, can in no sense be classed as a trust or a monopoly. The business today is conducted to prevent discrimination between insurants, to keep down the cost of the service to the public and at the same time to offer immediate inducements in lower rates to those who safeguard their property from fire, thus giving them a voice in making their own rates.

In the past all rating was done by officers and field representatives of the companies themselves, but in later years the work has passed into the hands of trained men, experts, independent, in a large measure, from both stock companies and agents. This change has come about because of the intense competition in the business between the various companies and their representatives in every hamlet, village and city in the United States. No other result could be expected.

Rate Schedules Made by Experts

Just how rating has drifted away from direct company control is told in the report of the Illinois Legislative Commission appointed to investigate the whole subject. "The work of constructing rating schedules," the report says, "instead of being performed by secret conclaves of underwriters themselves, as the public has been led to believe, appears, from our testimony, to have passed almost entirely out of their hands into those of trained

experts. The testimony shows that fire insurance companies have little or nothing to do with the construction of schedules. The schedule maker in fire insurance today occupies a position analogous to that of the actuary in life insurance. He is expected to deal with fire hazards by analysis and classifications of elementary parts."

Coordination among companies to reduce costs and prevent discriminations between insurants; schedule rating, subject to basic review by the state, if desired; and adequate insurance to value—a point touched upon briefly in a previous article, together with a limitation on the maximum distributable profit to be realized on the net transactions of the companies, form the safest and sanest method yet devised for the economic administration of any business of a semi-public character. This, indeed, is the present-day basis on which stock insurance companies are operating.

Fire insurance rates measure the amount of premium the assured must pay for his insurance. The recognized fundamental principle of fire insurance rating is that the hazard makes the rate, that is, the rate is governed by the hazard.

Hazards Differ with Class of Risks

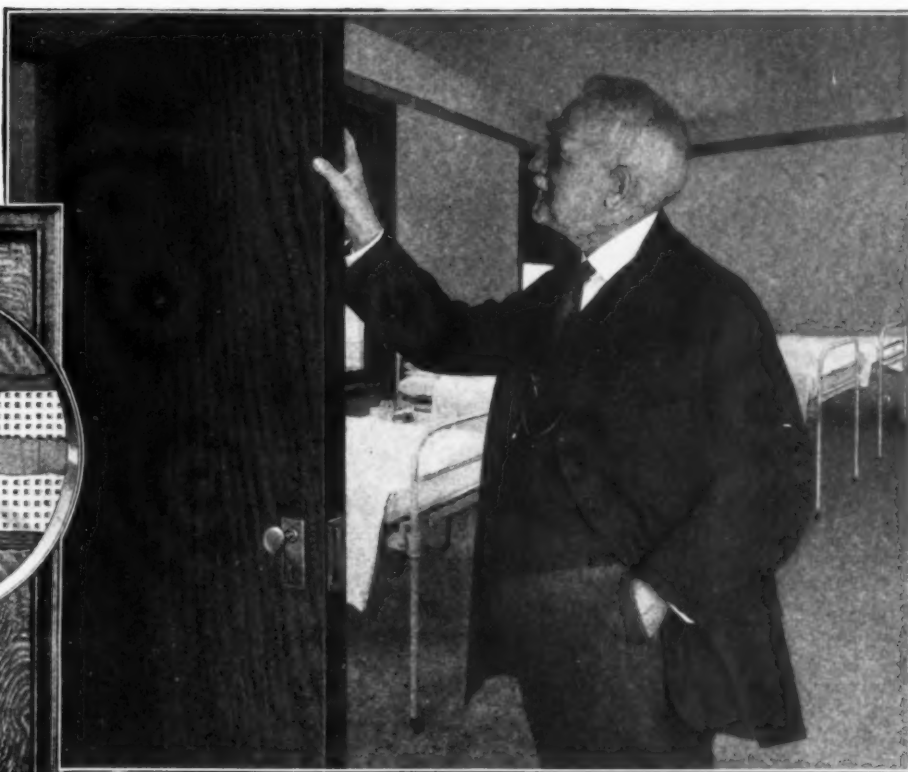
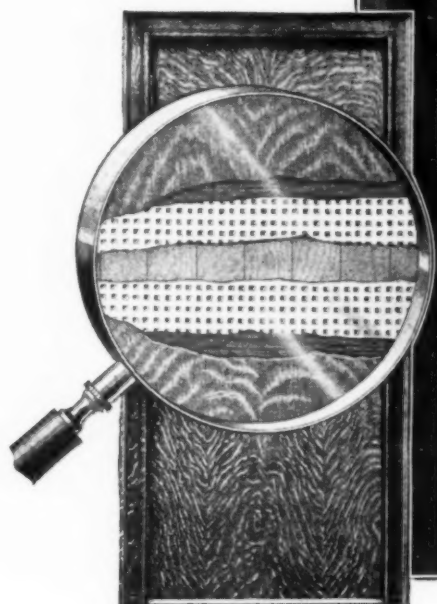
Granting that the hazard does make the rate, in rating it is necessary to measure the hazard in each class of risks and of the individual risk of each class. Each general class of risks has hazards peculiar to that class and each individual risk of a class will be found to contain hazards peculiar to that particular risk. It is rare, if not impossible, to find two risks exactly alike in every respect. Each one will either have different hazards injected therein or differ in the manner of protecting those hazards.

The measure of hazard of the individual risk should be the rate on that risk. The greater the hazard the higher the rate, and vice versa.

The loss ratio on a class for a reasonable period of years, never less than five, establishes the best indication of the hazard of the class. The premiums on a class should produce an amount sufficient to pay the losses on that class, the expense of underwriting, and a reasonable profit to the companies writing the class. Unless the premiums on a class do this, the companies are writing the class at a loss and the rates on the class should be raised. Also unless companies collect premiums high enough to pay all losses and underwriting expenses and profit enough to build up substantial sums as surplus, they are not in position to meet the demands against them for losses sustained in large conflagrations, and this subject of conflagration hazard should be taken into consideration in the preparation and promulgation of rates.

It is a well-recognized fact that it is impossible to

This shows Pyrono construction magnified—the asbestos sheathing indented into the core and the cross-banded surface veneers applied over it



Pyrono's presence lightens responsibility

TO worn patients, a small blaze may prove as fatal as a conflagration. Thoughtful members of hospital staffs take equal precaution against both minor alarms and big fires. Pyrono, ordinarily serving as part of a hospital's homelike decoration, gives ample assurance that if fire breaks out apprehension will not be widespread.

Pyrono Doors and Trim are built of the finest cabinet-wood veneers applied over a non-resinous, laminated core. Between veneer and core, however, is placed asbestos sheathing which is mechanically bonded to the core. The result is fire-proof construction, presenting at the same time all the attractiveness of the most beautiful woodwork. Pyrono doors can be fitted with smoke-proof and practically sound-proof tightness because under extremes of temperature they do not expand, contract, warp, buckle nor bind in their frames. No danger of being trapped by a jammed door.

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measure "moral hazard," and in the preparation of schedules from which to calculate fire insurance rates, no recognition is made of moral hazard, and the physical hazard alone is considered.

Rating—A Measure of Physical Hazard

Insurance rating is the science of measuring the physical hazard of a risk to arrive at a just and reasonable rate for insurance. Rating schedules are the written formulae of the consensus of the combined judgment of the best underwriting and rating experts, based on the actual results of the combined experience of the insurance companies on various classes for a long period of years. They constitute the measuring stick which may be used by the individual and less expert rater to ascertain the proper rate to charge on the individual risk. Rating schedules also eliminate to a great extent the personal equation in the judgment of different experts. We can ascertain the well-recognized hazards of a certain class and be sure that charges in the insurance rate should be made for those hazards, but just what the amount of the charge for such hazards should be, cannot be exactly determined. Nor can we ascertain with certainty just what the credits for protective devices should be; hence rating schedules approximate it as nearly as is humanly possible.

As heretofore stated, experience and statistics are the best guides in the preparation of rating schedules, and all rating organizations use every means at their disposal to make rates just and reasonable. They are constantly making changes and corrections in their schedules to try and make them accord with changed conditions and newly discovered hazards.

Rate Making Organization in Each State

Practically every state in the United States has a rate making organization, and the principal function of these organizations is to prepare standards of construction, rating schedules and rules of application of these schedules for the preparation of rates for the territory under their jurisdiction. The methods used by the various rating organizations are similar, and though differing in many details, all operate under the same general principles.

Rating schedules take into consideration all details that have a bearing on the probability of a fire occurring; the probability of the spread of such fire; the probability of its being extinguished without total loss; the probability of damage in that fire by smoke and water. The probability of a fire occurring depends to a great extent on the occupancy and as to whether or not such occupancy is of a nature likely to cause a fire; as to whether the risk is clean and free from trash and rubbish, and as to whether a damage is likely to be sustained by reason of fire in adjacent risks. Probability of a fire spreading depends both on the class of occupancy and on the construction of the building.

Contents of high inflammability, more especially in buildings of frame construction, large areas not divided into fire divisions, unprotected floor openings, such as open stairs and elevators, all tend toward the quick and far-reaching spread of fire. The probability of the quick control and quick extinguishing of fire depends on the protection of risks by automatic sprinkler and fire alarm service, approved fire extinguishers, the installation of proper watchman service, good city water supply and ample well-equipped fire departments. The probability of damage by fire, water and smoke depends on the character of both building and contents.

Under this system there is intense and healthy competition between stock companies doing business in the United

States, now numbering about three hundred, with every incentive to keep down their expenses. Of course the best managed companies will make the most money while the cost of fire insurance to the public as a whole, expressed in rates, is limited by definite agreement.

Probably no other business in the world of the magnitude of that transacted by stock fire insurance companies has entered into a voluntary agreement to limit the profit on its net operations to but five per cent, with an additional three per cent (for your greater security) to be applied to the accumulation of "conflagration reserve funds" which can be drawn upon only in the event that when conflagrations come companies may not be able to meet their liabilities out of surplus funds.

To you who operate hospitals the question might be asked: Is five per cent distributable profit too much for a business such as stock fire insurance which is filled with so many intricacies and uncertainties, requires so much knowledge and good judgment and which is subjected to such keen competition?

BIBLIOGRAPHY ON FIRE PREVENTION COMPLETED BY HOSPITAL LIBRARY

A new bibliography on fire prevention and fire protection of hospitals has recently been completed by the Hospital Library and Service Bureau. The bibliography covers in a very complete way the subjects of hospital fire prevention and protection under the following classifications: fire prevention and protection for hospitals; films; fire prevention and protection—general; fire extinguishing; fire resisting materials and construction; fire drills; fire alarms; fire doors, escapes and panic exits; causes of fire; laws, ordinances and regulations, fire insurance. The other divisions of the bibliography not included in this classification refer to the more general articles which are applicable to the hospital, but not restricted to this group.

DIETETIC NEWS ITEMS

(Continued from page 478)

The regular monthly meeting of the Chicago Dietetic Association was held at the Crerar Library at 8 p. m., March 20.

Mr. Fred Scheibe of the National Bakers' Association outlined plans which are going forward for the establishment of a culinary training school in Chicago. He said that the situation of immigration has made it increasingly difficult for hotels, restaurants and hospitals to secure competent cooks, so that a school of this sort is a pressing need.

Mr. Scheibe's talk was followed by a business meeting. The president told briefly of plans for the entertainment of delegates to the A. D. A. Convention, which is to be held in Chicago, next October.

There was some further discussion of changes in the constitution to make possible an affiliation with the National Association. This was turned over to the committee on revision to come up at a later meeting.

Miss Olga Young resigned her position as first assistant dietitian at the Mount Sinai Hospital, New York, N. Y., the middle of February. She is doing some experimental work for Miss Lulu G. Graves.

Miss Helen Gilmore, former assistant at Mount Sinai Hospital, New York, N. Y., has accepted the position of dietitian at Alston's House for Private Patients, New York.

(News Items Continued on page 492)

FAITH

Faith in Religion—in American institutions—their ideals, spurs us on to greater achievements.

Faith in others—to recognize superior quality and workmanship—to appreciate the true value of *Good Glass Service* makes us strive to supply at all times *Glassware of Service*.



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have that smooth finished edge, clear color, sparkling polish and smooth bottoms.

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DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Medical Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 15 W. 43rd Street, New York

THE OPHTHALMIC OUT-PATIENT DEPARTMENT OF GUY'S HOSPITAL

By HERBERT L. EASON, C.B., C.M.G., M.D., M.S. SENIOR OPHTHALMIC SURGEON AND SUPERINTENDENT, GUY'S HOSPITAL, LONDON, ENGLAND.

THE methods and policies employed in the ophthalmic out-patient department at Guy's Hospital, described in this article, are similar to those in operation at practically every general and special hospital in London.

The general policy underlying the organization of any out-patient department is that it is in the best interest of the patient that he should be under the care of the same person from the time that he first enters the hospital until his final discharge. The ophthalmic surgeons, therefore, not only have beds in the hospital for their patients but also attend in the out-patient department. Cases eligible to the ophthalmic surgeon's beds come solely from his own out-patient clinic. As a result, the patient is under his care throughout, and the surgeon can personally follow his case through to the end.

If a patient is admitted to the ward his out-patient record goes to the ward with him, and when the patient leaves the ward an abstract of his case is sent down to the out-patient department to be incorporated in his subsequent out-patient record. The actual in-patient record is filed at the central record office in the superintendent's office, where all hospital records from every department are kept, and is available for information should the patient be admitted in the future to the ophthalmic or any other department. In the central record office the records are cross indexed, by a card index, both under the patient's name and under the name of the disease.

The out-patient department is housed on the top floor of

the out-patient building, as this affords the best light for the external examination of the eyes. The clinics are held in the afternoon so that a maximum amount of light is had from the windows which face north.

The waiting lobby accommodates about thirty patients

at a time. All patients pass, in the first instance, through the surgeon's room, where they are seen by the surgeon himself, who decides whether they require examination and treatment by him, or can be sent on to the refraction room.

The refraction room is about thirty feet long, and is wide enough to permit four refractionists to work abreast simultaneously at a distance of twenty feet from the test types. Opening out from the refraction room is a dark room with nine cubicles for ophthalmoscopic examination or retinoscopy. Adjoining the refraction room is a small room for perimetry and other examinations and an operating theatre for minor operations.

There is a full equipment of lens cases, spectacle frames, perimeter, scotometer, drugs and instruments.

As stated above, it is desirable for all new patients and the great majority of old ones to be seen by the surgeon himself, otherwise there is no continuity in the personal relation of the patient to his doctor. As about seventy to eighty per cent of the patients require an estimation of an error of refraction, it is impossible for the surgeon to do all this work. Therefore two paid clinical assistants are attached to the department. They are paid, as are the chief clinical assistants in all other departments, as it is

Dispensing Methods in London

In the out-patient department of Guy's Hospital the patient is under the care of the same person from the time he enters until he is finally discharged. If it is necessary for a patient to be confined he is eligible for one of the surgeon's beds in the hospital, provided that he comes from that surgeon's out-patient clinic. As a result, the patient is under that surgeon's care throughout, and the case can be personally followed through to the end.

Refraction cases constitute nearly seventy-five per cent of the number of patients treated and necessitate more attention than the surgeon can give unaided. Therefore, the department has two paid assistants who, in the absence of the surgeon, are responsible for the treatment of the patients in the wards.

During clinical examinations, paid social workers are present in each surgeon's room, taking notes and keeping records of every case appearing for treatment. The almoner, or social service department head, takes care of all persons requiring financial assistance for treatment, appliances, and home nursing.



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the view of the lay governors of the hospital and of the medical staff that, though the services of the visiting staff should be honorary, the clinical assistants are young men wishing to specialize in certain subjects, and they must live while they are learning.

Salaried Clinical Assistants

Moreover, the clinical assistants have not the security of tenure of the visiting staff, and if they are paid a salary their obligation to the hospital is greater than if they are voluntary. The clinical assistants are not newly qualified medical men but are selected from post-graduate students (not necessarily from the same hospital), who have already had considerable experience in ophthalmology, and who have taken or are in line for, one of the several diplomas in ophthalmology now available at the different universities and colleges in this country.

The clinical assistants do the greater part of the refraction work of the clinic, and also assist in the more technical investigation of cases which cannot be undertaken by the students in training. In order to keep the chief clinical assistant in touch with the wards, he also acts as registrar and tutor to the students in the eye ward, and is responsible for the compilation of the ward reports. In the absence of the surgeon he is, subject to the approval of the medical committee, responsible for the treatment of the patients in the wards, including operations.

New Cases Classed in Four Divisions

Much time can be saved both to the patients and the staff of the department through proper organization of routine. In my department the patients must all be at the hospital by twelve noon, and the surgeon and his assistants open the clinic at one o'clock. In the interval between twelve and one o'clock they are interviewed by the out-patient inquiring officer, who decides whether they are eligible for hospital treatment. Subsequently, they are given a case sheet and a corresponding numbered card. A card index of all these case sheets is kept in the department. On being drafted to the clinic, they are classified into four groups:

- a. Children of school age requiring spectacles.
- b. Adults from fourteen to forty requiring spectacles.
- c. Adults from forty upwards requiring spectacles.
- d. Cases of obvious eye disease.

(a) Children of school age are immediately ordered a mydriatic and given an appointment card for the next session of the clinic. Printed instructions for the use of mydriatics are given.

(b) A mydriatic (homatropin and cocain) is put into the eyes of all adults under forty.

(c) While this mydriatic is taking effect the patients over forty are tested for the necessary correction of their presbyopia.

(d) The cases of eye disease are examined, explained and treated by the surgeon.

By means of this organization a clinic of from thirty to forty new patients and from eighty to one hundred old patients is dealt with in under three hours. At this period the surgeon, his two paid clinical assistants, possibly one or two other unpaid clinical assistants, and six or seven interns or senior students are working in the clinic.

Probably from sixty to eighty per cent of all patients attending the clinic are refraction cases. It is impossible to give any actual figures as to the number of refraction cases that can be dealt with in an hour, as this, of course, depends to a great extent on the experience and rapidity of the principal refractionist. I, myself, if working alone

and not teaching, can do about twelve children's straightforward refractions in an hour, if the children have already been atropinized. I do all the retinoscopies first, and then take the children into the refraction room and test their vision objectively. Taking all refraction cases together, including children, young adults and simple presbyopics, I think that the average of six to eight can be comfortably cared for in an hour. I believe the lower figure, six an hour, is the standard taken for school clinics in London.

If some such routine is not carried out, the clinic may drag on for four hours or more, owing to late arrivals who require a lengthy examination after a considerable delay caused by waiting for the action of a mydriatic.

At the same time as my ophthalmic clinic is being held, the throat and ear surgeon, the skin specialist, and the bacteriologist and vaccine expert are also sitting in adjoining departments. In this way, ample opportunity is afforded for consultation, and I make a practice of going personally with the patient and my dressers to see my colleague about any case requiring his opinion. A general hospital with an ophthalmic department among others, has, in this respect, a great advantage over a special ophthalmic hospital. All other investigations, histological, bacteriological, or radiographic, are requested on forms provided, and the reports are returned to the department for incorporation in the out-patient record.

At each session of the clinic a social worker, appointed and paid by the London County Council, the educational authority for the County of London, sits in the surgeon's room with the surgeon. She keeps a record of each child of school age, notes the diagnosis and treatment ordered, for the information of the school medical officer, and makes the necessary arrangements for absence from school and for institutional treatment.

All other persons requiring financial assistance for the supply of spectacles or other appliances, convalescent or institutional treatment, or home nursing, are referred to the almoner (a salaried hospital officer who is head of the social service department) or her assistants (also paid by the hospital). The hospital does not rely on voluntary workers for social service.

As the hospital is provided only for the indigent no paying patients are admitted to the clinics. No fees are charged by the hospital, and neither the surgeon nor his assistants are permitted to take any fees from the patients for their services.

Spectacles are provided by an optician in the immediate neighborhood at an agreed scale of charges appropriate for hospital patients.

Students appointed to the ophthalmological department are assigned to the individual surgeon, and work both in the wards and in the out-patient department.

Clinic Held Promptly at Definite Hour

The clinics are held at definite hours on definite days in the week, and the time of arrival and departure of the surgeon and his assistants is noted in the attendance register. This register is submitted weekly to the superintendent and the house committee.

A standard formulary, the Guy's Hospital Pharmacopoeia, is used, and under ordinary circumstances only these formulae are used in the out-patient department. The revision of this pharmacopoeia is undertaken from time to time by a committee of the medical staff of the hospital.

According to the standing orders of the hospital, regular clinical teaching is an essential part of the duty of every member of the visiting staff.

Our Facilities

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Headquarters for Endocrines

and other Organotherapeutic Products

ARMOUR AND COMPANY, CHICAGO, as one of the world's leading makers of Endocrine Gland and other organotherapeutic agents, recognize the responsibility that is theirs.

One-third of a century ago the Armour Laboratory was established to utilize the glands and membranes supplied by their abattoirs in plenty and from which important therapeutic preparations are made. During this time it has been their constant endeavor to give the medical profession the most reliable products of the kind and today we are willing as ever to assist physicians in the labors that confront the endocrinologists.

The demand for the Armour Laboratory Products throughout civilization proves success and justifies continued efforts.

If you have a case in which Thyroids—Corpus Luteum—Ovarion Substance—Pituitary—Parathyroids—Suprarenals—are indicated, you may depend upon the preparation bearing the Armour label.

PITUITARY LIQUID

(10 per cent), a premier preparation of posterior pituitary active principle, is sterile isotonic and without preservatives; 1 c.c. ampoules (surgical), $\frac{1}{2}$ c.c. ampoules (obstetrical) boxes of six and fifty.

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is water-white, stable, uniform and free from added chemicals—1 oz. g. s. cup stoppered vials.

ARMOUR'S NON-BOILABLE CAT GUT LIGATURES

are sterile—smooth—strong and as supple as silk—nothing more satisfactory is made from cat gut.

ARMOUR AND COMPANY CHICAGO

OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by LOUIS J. HAAS, Director of Men's Therapeutic Occupations, Bloomingdale Hospital, White Plains, N. Y., and
MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.

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HAMMOCK MAKING AND CANVAS WORK FOR MEN

By JOSEPHINE WALKER, SUPERVISOR, RECREATION AND OCCUPATION, BURKE FOUNDATION, WHITE PLAINS, N. Y.

INDOOR occupational therapy for men convalescing is essential, especially for the more crippled, in bad weather, but difficult to adapt in many institutions, as these patients average less than two weeks of work period, and therefore, cannot be expected to acquire much skill. After varied experiment and elimination we have come to use in the shops only simple woodwork and furniture repair, a narrow line of cement ware (partly decorated), painting, basketry, clothing and shoe repair, barbering, library (with book mending) and canvas work. Canvas work has proved satisfactory and merits a brief description, as this type of work is applicable to many other institutions.

Three to eight men or boys, generally led by a seaman, turn out hammocks, stool-tops, laundry and other bags, chair re-seatings, tether-ball covers, baseball bases, and awnings. The outfit consists of No. 4 white duck canvas ninety inches wide (to allow cut of hammock stock cross-wise), a "grommet set" and grommets No. 3 tacks, rope, cord for sewing, sail needles and "sewing palms."

Hammock making and mending afford the main part of this occupation. The material is cut one yard wide, sides folded two inches and ends folded four inches and sewed, five grommets only in each end and full half-inch ropes about thirty inches long spliced at grommet and ring, with adjusted lengths to give the desired hollow effect—finished size, six by eight by thirty-two inches. Cost, allowing 20 cents an hour for handicapped labor and some-

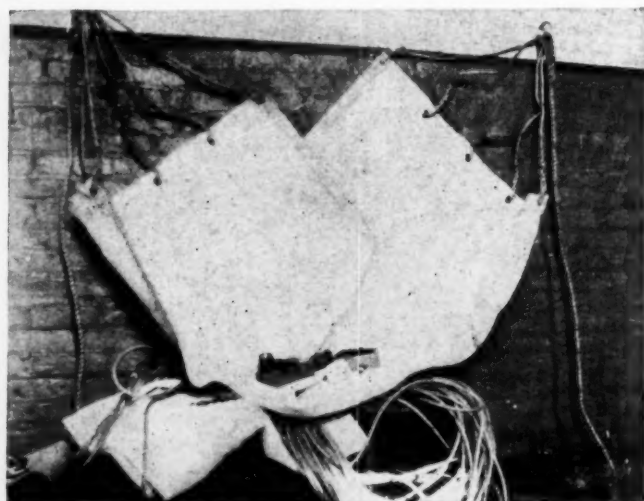


Hammocks help patients to enjoy outdoor life.

thing for overhead, is about five dollars. The hammocks prove saleable to other institutions, camps, etc., and for residence use.

Store hammocks will not last long under the rough usage of convalescent, camping and fresh-air children and adults. Some of ours, described above, have had the hardest use, as they have been left out eight months of the year, for eight years. Their repair is easy. Only weather-rotting of the canvas finally finishes them. Other sizes may be designed, but the long and narrow one bears least corner strain and is most comfortable.

The Burke Foundation has on its grounds about sixty hammocks for its 300 patients, and others for the employees. The use of hammocks is often definitely prescribed by the physician, as they aid ambulant patients to rest in the open air.



Canvas in the process of hammock making.

DYEING EQUIPMENT AT RETREAT HOSPITAL

By MARY L. PUTMAN, Field Representative, Occupational Therapy,
Department of Welfare, Harrisburg, Pa.

Dyeing has become a problem in many of the state hospitals where extensive work is done in weaving and other uses to which rags and waste materials are put in occupational therapy work. Many hospitals find it difficult to have a convenient spot for the dyeing process. Retreat Hospital, Retreat, Pa., which houses 600 patients has solved the problem in a satisfactory way.

As is seen in the illustrations, two hogsheds are attached to the steam pipe in a basement room which also contains a floor drain. About four inches from the bottom, inside the barrel there is a circular pipe which is perforated. Hot and cold water pipes are connected with the barrels between which runs the steam connection with a valve. There are faucets inside each barrel. Sinks from

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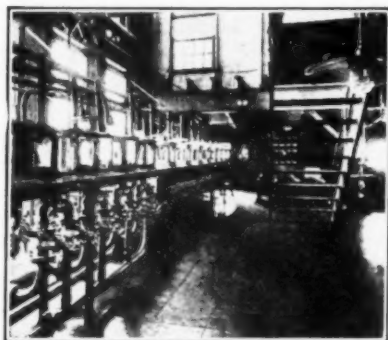
Modern equipment that insures utmost economy and efficiency in alcohol production

THE modern and extensive plants of the U. S. Industrial Alcohol Co. represent the highest development in alcohol producing equipment.

Every building, every bit of apparatus, every piece of machinery has been designed or selected with one fundamental purpose in view—to produce highest quality alcohol with utmost efficiency and economy.

Most of this equipment has been designed by the company's own technical staff, and built in the company's own workshops. Back of its construction are decades of experience.

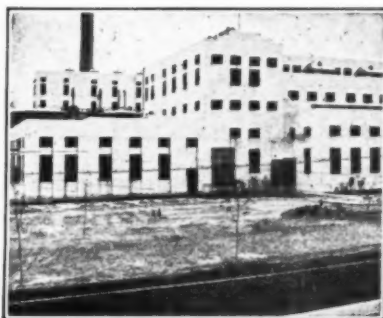
Not only is the greatest care given to the planning and con-



Apparatus in which partly refined alcohol is tested

struction of these plants, but also to their maintenance and operation.

A staff of experts is constantly engaged in the close study of the most efficient and economical arrangement and use of this equipment. An entire building—the Experimental Distillery—is given over to just such research work. Here is studied not only the production of alcohol but also the most complete conserva-

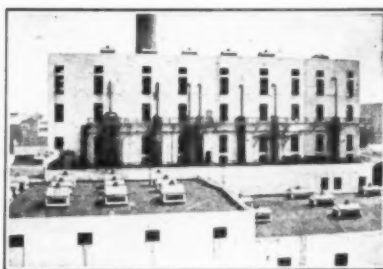


One of the modern buildings of the Baltimore Plant

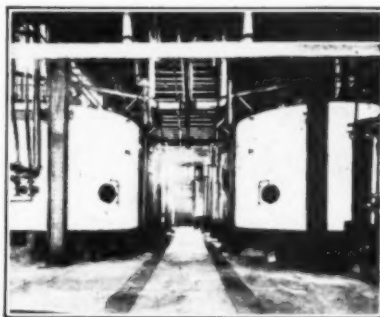
tion of by-products which can be utilized in other industries.

The methods and equipment proved most effective in this experimental building are then adopted in the company's various plants engaged in actual production for commercial distribution.

And in the latter every step in this manufacture from the crude



Exterior of main distilling building



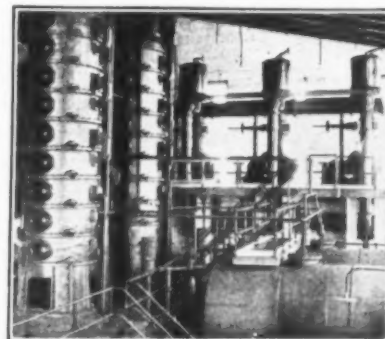
Interior view—showing rows of alcohol stills

molasses to the finished product is under the supervision of men long trained in their work.

Alcohol production is fortunately one of the industries that requires a comparatively small number of men to operate its equipment. But though the number of men needed is small, each of these men must be an expert in his particular duties.

The U. S. Industrial Alcohol Co.'s staff is thoroughly trained, thoroughly competent. Most of the employees have held their positions for years.

This company controls its supply of molasses. It owns the tank cars and ships needed to trans-



Installation which purifies an alcohol by-product

port this raw material. Its staff is unusually permanent, and highly skilled. And by designing and building much of its own equipment, this organization can produce alcohol with utmost efficiency and economy.

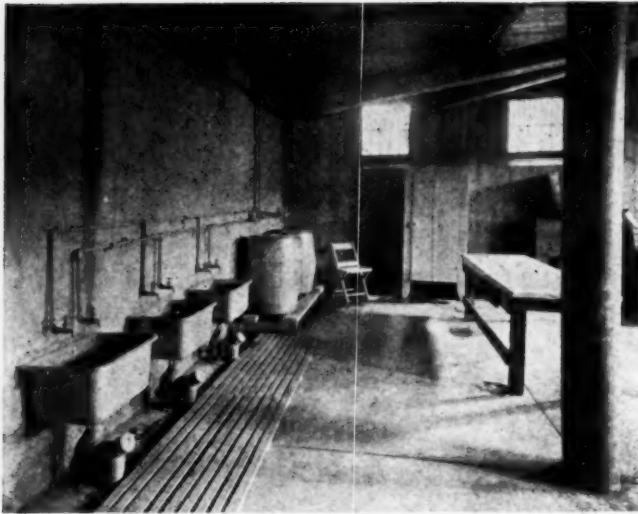
As a result, the U. S. Industrial Alcohol Co. is not only in a position to give prompt and uninterrupted service, but also to assure its customers the highest quality product at advantageous—and unusually stable—prices.

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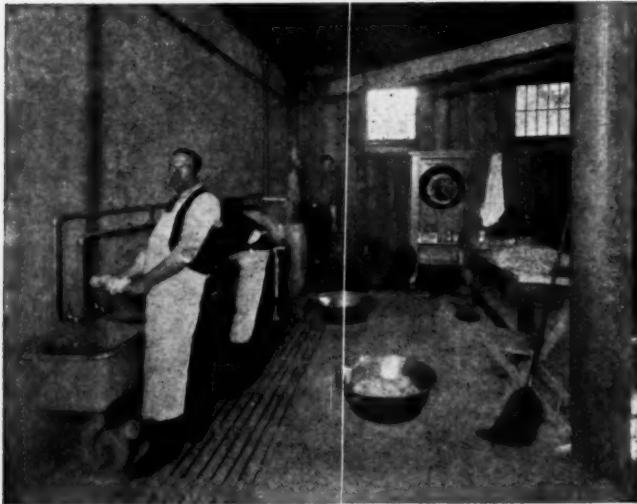
When using advertisements see Classified Index, also refer to YEAR BOOK.



A view of the dyeing room at Retreat Hospital showing barrels and sinks attached to the steam and water pipes.

a reconstructed building are also attached to the wall water piping.

The occupational therapist at Retreat Hospital has a trained team of four patients for this work. One runs the valve and regulates the water and steam in the barrels; the other three, in turn, put the rags through three rinsing waters, wring them and hang them to dry. By this



View showing four patients running steam barrels and rinsing dyeing materials.

system large quantities of burlap and rags may be dyed in two or three hours' time. The steam brings gallons of water to a boil quickly and assures fast dyes, as the materials can be thoroughly saturated and kept in boiling dye long enough to set the colors.

THE TOOL CHEST EXPERIMENT

The Crippled Children's School, Cincinnati General Hospital, Cincinnati, Ohio, has just completed an interesting experiment in tool chest work which was undertaken for a period of five weeks.

Instead of the regular hours a week in manual training the children devoted the morning to tool chest designing, construction and painting. The tool chest work was conducted on a business basis, as the chests were sold as commercial products. Two of the boys were paid for their work. The \$300 which was cleared from the

sale of the chests is to be used for added equipment in the department. The only expense incurred was the cost of lumber and paints, as the board of education furnished the tools.

The experiment was a success from every standpoint. The boys enjoyed the work and the teachers reported an improvement in academic work during the period.

CALIFORNIA PLANS SERIES OF LOCAL MEETINGS

The board of management of the California State Association of Occupational Therapy has planned to have local meetings of the association frequently during the year when members will have an opportunity of getting together to discuss their problems and of hearing talks from the medical and craft sides of occupational therapy.

The first meeting of this kind was held March 7, at the St. Francis Hotel, San Francisco, where meetings will be held the first Saturday afternoon of each month. Los Angeles members are planning similar meetings, but have not as yet announced the dates. Miss Helen Seeley, Berkeley, vice-president, presided at the meeting. After calling the meeting to order she gave the object in having these meetings, namely, to give the members an opportunity of hearing interesting talks pertaining to occupational therapy from the physicians and experts in various crafts. Then, Miss Seeley asked Miss Cadwalader, Berkeley, executive secretary-treasurer, to read an article on occupational therapy written by Mr. T. B. Kidner, on the request of the division of public health of the department of public welfare of the General Federation of Womens' Clubs. The speakers for the afternoon were Mrs. Isabelle Percy West of the faculty of the California School of Arts and Crafts, Berkeley, who gave a talk on the importance of design and color in craft work, illustrating her talk with interesting problems in design and charts of rare old designs of textiles and pottery. Following Mrs. West's talk Dr. P. G. Borden, commanding officer of the U. S. Veteran's Bureau Hospital, Palo Alto, a member of the association's advisory board outlined the occupational work at Palo Alto giving many helpful suggestions for occupational therapists, also telling how very important that work is in the treatment of the disabled veterans, especially the neuropsychopathic cases. An informal discussion followed and the meeting adjourned.

An appropriation of \$1,500,000 has been obtained for a new general hospital unit at the Soldiers' Home, Los Angeles County. This will be of special interest to occupational therapists as the new institution will include a fine department of occupational therapy.

The California association has sent out the following which is designed to state the purpose of the California Association and to interest as many as possible in the ideals and work of the association.

The aim of this association is to promote occupational therapy for the benefit of humanity and to establish its efficiency in hospitals, sanitoriums and private cases; to discourage the untrained from using the name of occupational therapist; to assist hospitals, sanitoriums and physicians in engaging occupational therapists; to give the California State Association of Occupational Therapy such standing that its members will be accepted anywhere; to establish as a beginning a basis which will help to secure for occupational therapy a definitely recognized position and to aid it to take proper place in the future as its development expands, and for the purpose to establish credentials for all authorized and approved occupational therapists.

Your patients will talk!



Are you improving this opportunity to gain their good-will?

"When I was in the hospital—." Everyone knows what follows in the stories of hospital experiences that are told and retold by discharged patients.

There is mention of hospital equipment and practices, the care accorded by physicians and nurses. And always there is comment on another matter of especial interest—the *quality of the food*.

Here is a particularly good chance to gain the good-will of your patients, to add to the prestige of your hospital. Serve foods that taste *especially* good. Patients expect foods that are wholesome. But serve them dishes that are finer-flavored, dishes that have that extra shade of goodness needed to tempt finicky appetites. You may be sure of their appreciation. You may be sure that

in their praise, your hospital will benefit by *increasing* good-will.

Foods of this distinctive goodness cost no more than ordinary foods. Many of the leading hospitals are serving them regularly—Libby's Pineapple, Libby's Asparagus and other Libby Foods in wide variety. They can be depended upon for unvarying quality, for finer flavors that will appeal to the most particular patient.

It is another advantage that you may have Libby's Foods in the quantities you need, and just when you need them. Look over the partial list of Libby's Foods below and see which ones you would like to try. Our nearest branch will supply you at once.

Libby, McNeill & Libby
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'Phone or write the Libby branch nearest you. You will find that Libby service is good too.

Albany, N. Y., 109-11 Montgomery St.
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Denver, Colo., 1738 Wynkoop St.
Detroit, Mich., 212 New Telegraph Bldg.
El Paso, Texas, 403-5 E. Main St.
Ft. Worth, Texas, Ft. Worth Stock Yards
Hartford, Conn., 301 Pleasant St.
Houston, Texas, 1213 N. Main St.

Jacksonville, Fla., Union Terminal Bldg.
Kansas City, Mo., 1522-24 St. Louis Ave.
Los Angeles, Calif., 825-7 Alameda St.
Memphis, Tenn., 693-9 S. Main St.
Minnesota Transfer, Minn., Care Central Warehouse Co.
Montreal, Que., Canada, 645 St. Paul St., W.
New Orleans, La., 514-6 Tchoupitoulas St.
New York, N. Y., 605 W. 27th St.
Norfolk, Va., 517 Front St.
Oklahoma City, Okla., 319 E. Grand Ave.
Philadelphia, Pa., 5th & Willow Sts.

Pittsburgh, Pa., 209 Ferry St.
Portland, Me., 253 Commercial St.
Portland, Ore., 41 Front St.
Salt Lake City, Utah, 404 Vermont Bldg.
San Francisco, Calif., 132 Pacific St.
St. Louis, Mo., 206-10 S. 7th St.
St. Johns, Newfoundland, 158 Duckworth St.
Savannah, Ga., 565 W. Hull St.
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*These Libby Foods of finest flavor
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Hawaiian Pineapple
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Olives
Pickles

Bouillon Cubes
Beef Extract
Chili Sauce
Catchup
Salmon
Boneless Chicken
Evaporated Milk

Occupational therapy may be defined as an activity, mental or physical, definitely prescribed and guided for the distinct purpose of contributing to and hastening recovery from disease or injury by means of physical and mental occupation. Though occupational therapy is a new term, its principle is as old as humanity, its purpose being to furnish a means of treatment for many of the physical defects and at the same time to aid in the restoration of self-confidence, courage and initiative, when these qualities are in danger of being lost on account of disability resulting from prolonged illness. Aside from the fact that occupational therapy is strictly a medical measure, it is at the same time constructive and makes for efficiency in the individual as well as in the community. Besides having a human element, it assumes huge proportions and because of its aid in reducing handicaps to a minimum, becomes of fundamental economic importance.

NEWS ITEMS

NATIONAL ASSOCIATION RECEIVES GIFT

A gift of \$500 a year for a three year period has been extended to the American Occupational Therapy Association by a friend of the association on condition that a sum of \$2,000 a year for the three years will be raised from other sources by the association. An offer of \$50 a year has already been received from a member of the board through which the \$500 a year for three years was secured.

The purpose of these donations is to help defray the expenses of a full-time office secretary recently created by the association to relieve the secretary-treasurer of onerous duties. As the income of the association from memberships is not large enough to defray the expenses of office secretary efforts are being made to defray the salary by donations and other forms of revenue.

Mrs. Eleanor C. Slagle, secretary-treasurer of the association, accepted the invitation of Dr. C. A. Porteous, superintendent, Protestant Hospital for the Insane, Montreal, Que., to address the representatives of social service and hospital organizations in Montreal on Friday, April 3, on the subject of "The New York State Plan of Rehabilitation for Mental Patients."

Illinois

The new officers of the Illinois Society of Occupational Therapists are as follows: president, Miss Helen S. Willard, Edward Hines Jr. Hospital, Maywood, Ill.; vice-president, Miss Winifred Brainerd, 323 Belden Ave., Chicago, Ill.; recording secretary, Miss Frances McNair, 2405 Colfax St., Evanston, Ill.; corresponding secretary, Mrs. Julius Moses, 4746 Ellis Ave., Chicago, Ill.; treasurer, Miss Lettie Amundsen, 4032 W. Newport Ave., Chicago, Ill.

The society has brought out its first bulletin. This is an important step taken by the association and one which we hope will be followed by other state associations.

District of Columbia

The Walter Reed General Hospital, Washington, announces the graduation exercises of the hospital training course for physiotherapy and occupational therapy aids held March 27.

The introduction was made by Major George F. Lull, M.C., U. S. Army, director of occupational therapy. The address of the occasion was delivered by Lieut.-Colonel A. C. Monahan, Sn., O. R. C., U. S. Army. The presentation of certificates was by Major General Merritte W. Ireland, Surgeon General, U. S. Army. The graduates were

Frances Johnson, Carolyn H. Jones, Doris F. Wilkins and Rita Ferne Woodman.

WELFARE COUNCIL FORMED IN NEW YORK

The Welfare Council of New York City for the further coordination of charitable and social work came into being April 2 during the fifth anniversary dinner of "Better Times," New York's welfare magazine.

The plan in its essence provides for the further coordination of the work of the city's charitable and social agencies by arranging for their voluntary grouping into certain functional divisions and sections. The board of directors besides promoting conference, understanding and closer cooperation between kindred groups, will study various social needs and social resources of the city, thus providing the necessary facts upon which the divisions and sections and the Welfare Council as a whole can arrive at well-founded recommendations as to relatively neglected fields, as to duplication of effort, and as to improvement of standards of service and of administration. A study of the feasibility of the community chest is foreseen, and other cooperative services are anticipated. The council will utilize fully all existing facilities for cooperation.

MT. SINAI TO OFFER THREE MONTHS' POST-GRADUATE COURSE FOR DIETITIANS

A post-graduate course is to be offered to dietitians at Mount Sinai Hospital, New York, N. Y., June 15 to September 15. It aims to offer opportunities to gain a broader practical experience in the modern dietary treatment of diabetes and other diseases of metabolism. During their period of training in the diet kitchen of a hospital, most student dietitians are taught to calculate diets, plan menus and prepare foods. This training does not adequately fit them to handle the practical problems which they are called upon to meet outside the hospital. As a rule, they have made no contact with patients and have never been obliged to work out dietetic problems face to face with them.

The metabolism clinic of the Mount Sinai Hospital is prepared to offer this type of supplementary training to a limited number of dietitians. Each worker will have her own group of patients and, under proper supervision, she will have an opportunity to calculate the diet and plan the menu to meet the individual need of each patient. The course will be directed by Dr. George Baehr, Dr. Herman Lande, Miss Bertha M. Wood and Miss Minna G. Roesse, in accordance with the following schedule.

Mornings

- 3 mornings—Metabolism clinic, calculating diets and instructing ambulatory patients.
- 2 mornings—Visiting hospital cases on wards and assisting in instruction of ward patients.
- 1 morning—Visiting other clinics in New York.

Afternoons

- 3 afternoons—Food clinic, instructing patients in the preparation of foods for diets.
- 2 afternoons—Class room work in planning diets.
- 1 afternoon—Free.

Every other Sunday on duty assisting with serving metabolism trays from special diet kitchen in hospital.

Applicants should address their communications to Miss Bertha M. Wood, supervising dietitian, Mount Sinai Hospital, 1 East 100th St., New York. The course will begin June 15th and last for three months. There will be no charge for the course. Students will be expected to furnish their own maintenance.

Responsibility of Superintendents

IF the buildings of a hospital are obsolete, overcrowded or non-fire-proof, will not a superintendent feel it his duty to tell the trustees—to tell them again and again? If the answer be that there are no funds, should he not call their attention to a service by which many other hospitals have asked and obtained from the public the funds that they needed?

We are specialists in the direction of hospital campaigns.

The results of our work for other hospitals should help you to determine what can be done for yours.

WILL, FOLSOM & SMITH

Five Hundred and Twelve Fifth Avenue

New York

MEETINGS, CONVENTIONS AND CONFERENCES

INDIANA HOSPITAL ASSOCIATION HOLDS ANNUAL MEETING AT TERRE HAUTE

SOME of the problems of modern hospital administration, the application of hospital standardization in the small hospitals, hospital organization in its bearing on hospital costs and the relationship of the surgeon to his hospital, were the principal subjects discussed at the annual conference of the Indiana Hospital Association, held at Terre Haute, April 15 and 16, under the presidency of Dr. Charles N. Combs, superintendent, Union Hospital, Terre Haute.

The annual business session of the association, held Wednesday afternoon, was preceded by a meeting of the Indiana State League of Nursing Education, at which Dr. F. E. Wiedemann spoke on "Economic Conditions of Latin America" and the Misses Mildred Cardwell and Emmy Lou Ferguson, Union Hospital, Terre Haute, presented a brief dialogue depicting the superiority of the educational advantages of the student nurse of today over the educational advantages of the student nurse of earlier days.

Turnover of Superintendents of Nurses

The annual dinner of the association was held in the ballroom of the Hotel Deming. After dinner speeches were given by Mrs. Ethel P. Clarke, of the Robert W. Long Hospital, Indianapolis, and Dr. M. T. MacEachern, director of hospital activities of the American College of Surgeons, Chicago, Ill. Mrs. Clarke spoke on the turnover of principals of nurses' training schools in Indiana. She pointed out that among the thirty-two schools in the state fourteen had had a total of seventeen changes in the course of a year. In an attempt to account for this heavy turn-over, she gave the following as probable reasons: (1) Dissatisfaction of the board of directors of the hospital with the principal and her work. (2) The existence of a progressive principal, in an unprogressive hospital. (3) Principal's dissatisfaction with existing conditions, such as inadequate help.

Resignations due to the first of these three causes, she thought, could be reduced in number by more careful selection of training school heads. The second difficulty, Mrs. Clarke felt, might be partly overcome by keeping the hospital abreast of scientific advance.

The turn-over occasioned by the last reason, she felt, could be lessened if the hospital board of directors realized the difficulties inherent in the situation. She suggested that the superintendent of nurses should be given an audience at meetings of the board of directors to discuss the problems connected with her work.

Because of the limited amount of time at his disposal, Dr. MacEachern contented himself with enumerating fifteen of the outstanding problems of modern hospital administration, with brief comments on each of them. These problems are (1) Lack of properly trained hospital executives and other personnel; (2) excessive turnover among hospital employees; (3) hospital finances, in which the wider introduction of cost accounting and the budget system have been of some help; (4) the selection and appointment of the medical staff and extension of the privilege of practice in the hospital; (5) proper supervision and control of the clinical work of the staff; (6) good case records; (7) adequate supervision over laboratory and x-ray work; (8) complete review of the clinical work of the medical staff; (9) increasing post-mortems; (10) study of end-results; (11) prevention and control of contagious diseases within the hospital; (12) fire hazards; (13) greater community interest; (14) adequate nursing service; (15) obnoxious legislation. This last problem, Dr. MacEachern felt, called for the active interest and effort of state hospital associations.

The dinner was followed by a social session and dancing in the ballroom of the hotel.

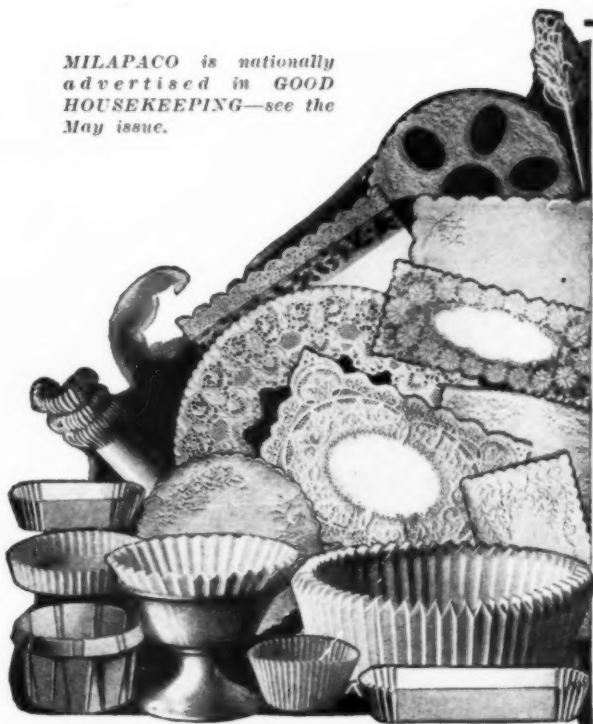
Standardization in Small Hospitals

Thursday morning's session was opened by another address by Dr. MacEachern in which he spoke briefly on the "Application of Hospital Standardization in the Smaller Hospitals." He pointed out that of the 3,302 hospitals now registered with the American College of Surgeons, 49 per cent had between 29 and 50 beds and 47 per cent were located in communities with a population of 10,000 or less. Dr. MacEachern dwelt upon the feasibility of having suitable staff organization in the smaller hospitals and the periodical meetings of the staff to discuss the clinical work of the hospital. With regard to laboratory service he felt that the small hospitals could not be expected to be as elaborately equipped as the larger ones and would, in consequence, have to depend for the major part of their work on laboratories of local departments of health or upon the state laboratory.

In many instances this service could be secured from local commercial laboratories. Every small hospital, however, he felt, could do its own work in urines, bloods, sputums, smears and spinal fluids.

He felt that the most difficult problem the small hospital had to face in the application of the minimum standard was the keeping of adequate records. The best rec-

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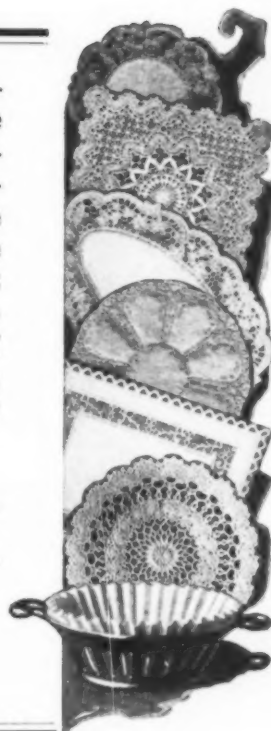
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ords, he found, were written by the doctors themselves, on standard form which have been devised by a special committee of the American College of Surgeons.

In speaking on hospital organization in its relation to costs, Mr. Joseph J. Weber, editor, *THE MODERN HOSPITAL*, Chicago, Ill., pointed out that in many instances the poor planning and location of the hospital's physical plant made cost reductions through efficient organization impossible. He pointed out that efficient organization involves the application of two fundamental principles, namely, the responsibility of the board of directors for every phase of the activities carried on in the institution, and the centralization of authority in the hands of the superintendent who must be held responsible for all of the institution's activities, including its medical work.

Mr. Weber also dwelt upon the budget as a check upon hospital expenditure and the necessity of organizing the institution with a view to eliminating waste both of human effort and of supplies.

The afternoon session was devoted to a round-table discussion, led by Mr. Robert E. Neff, superintendent, Robert W. Long Hospital, Indianapolis. The following were among the topics discussed: The hospital's obligation in keeping patients' histories confidential; how far should a hospital go in the collection of its pay-patients' accounts; uniform method for computing per diem cost; should hospitals charge insurance companies less than the per diem cost for industrial accident cases; budget making and budget control; best policy as to the charges for extra laboratory examinations and other charges.

The officers for the new year are: Dr. H. A. Duemling, Lutheran Hospital, Fort Wayne, president; Miss Harriet Jones, Cass County Hospital, Logansport, vice-president; Miss Rosetta Graves, Union Hospital, Terre Haute, secretary; Miss Raechel L. Hill, Indiana State Board of Charities, Indianapolis, treasurer; Mrs. Ethel P. Clarke, Indiana University Training School for Nurses, Indianapolis, trustee for three years; Dr. Charles N. Combs, Union Hospital, Terre Haute, trustee for two years.

PENNSYLVANIA HOLDS FOURTH ANNUAL CONFERENCE AT PHILADELPHIA

THE fourth annual conference of The Hospital Association of Pennsylvania was held at the Hotel Adelphia, Philadelphia, Pa., April 14, 15 and 16, 1925.

The principal address at the opening meeting was by Dr. Joseph C. Doane, medical director, Philadelphia General Hospital, and president of the association, who spoke on "Signs of the Times in Hospital Work." Dr. Doane brought out that hospital administrators were tending more and more toward interest of patient in connection with every phase of their work and installation of equipment. Among the serious problems still confronting hospitals he listed the turnover of personnel in hospital administration. This fault seems to lie both with superintendents and boards of trustees. The projected courses outlined by the American Hospital Association for the training of future hospital executives should, according to Dr. Doane, be a big step toward the solution of this difficulty. Hospital boards should be trained in hospital practice, he believes, so that the hospital administration as a whole will be unified in its thoughts and actions.

On Tuesday evening the delegates and friends were entertained in public meeting by orchestral selections and vocal solos. An address was given by the Hon. John S. Fisher, president, Indiana Hospital, Indiana, who explained in some detail the history of hospital state aid in Pennsylvania. Speaking as an ex-state senator and active hospital head, he emphasized strongly the duty of the state to continue adequate financial aid, in view of the inseparable tieup of hospital activities with the welfare of industrial and civic life.

Nursing Objectives

"The objectives in Nursing Education" was the fundamental thought of the Wednesday morning session. Miss S. Lillian Clayton, R.N., director of nurses, Philadelphia General Hospital, outlined these objectives. Among the objectives to be reached are: what the nurse has to do for community, social and health organizations; what she does for the nursing profession, and what she can do in self-betterment.

In discussing the manner in which the objectives in nursing education may be obtained, Alice Garrett, R.N., director of nurses, Methodist Hospital, Philadelphia, compared the situation to a triangle wherein the base is formed by the knowledge acquired by the student nurse in the classroom. Built upon this base are the sides of skill and practice which constitute the sum total of the trained nurse.

Miss Stella Goostray, R.N., educational director, Philadelphia General Hospital, outlined the fundamental studies embodied in the teaching of the scientific principles underlying skill in the art of nursing.

Miss Marie C. Eden, R.N., director of nurses, Presbyterian Hospital, Philadelphia, showed how the objectives may be reached by developing the spirit of service in the nurse in training. She brought out that the supervisor or director of nurses must inculcate in the student the spirit of service, and suggested the desirability of more hospitals trying out the plan of putting selected students through a course in preparation for the future duties of supervisor.

The Doctor and the Dietitian

Dr. Edward S. Weiss, Jefferson Hospital, Philadelphia, opened the afternoon session by outlining the relationship which exists and should exist between the doctor and the dietitian. He indicated that the dietitian is too often occupied with her duties of a purely mechanical nature in the operation of her kitchen, and that additional help may be the solution of the problem. The dietitian must bear the same relation to the doctor as the laboratory technician or pharmacist, all of whom should fill prescriptions to fit the case in hand. As a remedy for some of the existing difficulties, Dr. Weiss suggested better instruction of physicians with a view to a more complete cooperation between physician and dietitian. On the other hand, the dietitian should be encouraged to follow up her work and see the end-results of her scientifically prepared diet in the wards and private room. Furthermore, if the doctor would go to the diet kitchen he would obtain a more thorough idea of



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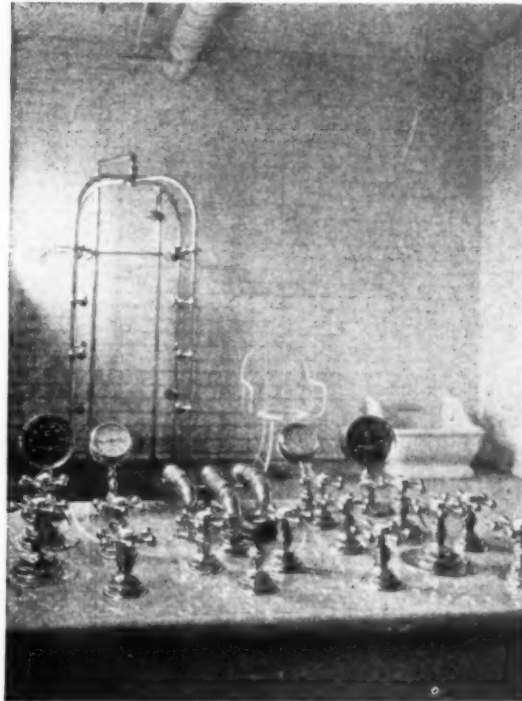
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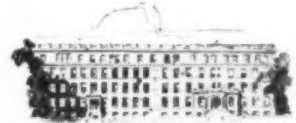
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the manner in which the special diets are prepared.

Discussion then followed in which Miss Helen Gilson, chief dietitian, Pennsylvania Hospital, emphasized the desirability in the planning of new hospitals of a consideration of the area to be covered by physician and dietitian in the follow-up work incident to the care of special diet cases. Miss Elizabeth Miller, dietitian, Philadelphia General Hospital, spoke of "The Dietitian and the Hospital," in which she defined clearly the administrative relationship between the dietitian, superintendent, and supervisor of nurses.

"Recent Advances in the Dietary Service of Hospitals" was the subject of a paper delivered by Mary De Garmo Bryan, Columbia University, New York, N. Y., who described the dietitian as one of the vital factors in hospital operation.

Round Table on Small Hospitals

A round-table discussion of problems in hospitals of less than 100 beds was held Thursday morning and conducted by Miss Esther J. Tinsley, R.N., superintendent, Pittston Hospital, Pittston, Pa., and Elizabeth Shaw, R.N., superintendent, St. Margaret's Memorial Hospital, Pittsburgh, Pa. Among the subjects discussed was the question as to whether a hospital should have a flat rate in which should be included the cost to the patient of the laboratory work performed.

Miss Jessie J. Turnbull, superintendent, Elizabeth Steel Magee Hospital, Pittsburgh, Pa., asked why training schools for nurses should be maintained. This question developed into a broad discussion on the cost of educating the nurse and the value to the community hospital from such education.

In the afternoon Dr. Wilmer Krusen, director, department of public health, Philadelphia, addressed the meeting on the subject "The Hospital in Its Relation to Community Health." He stressed the fact that in some instances, towns and cities have too many hospitals and that concentration is desirable.

Miss Anna E. Laughlin, R.N., superintendent, Waynesboro Hospital, Waynesboro, spoke on "The Service of the Rural Hospital to the Community," and quoted figures from THE MODERN HOSPITAL to show the increase in the number of small hospitals and the numerical relations of the community hospital to the larger ones in the city. Miss Laughlin dealt with schools for nurses in the small hospitals and the trend toward centralization in this connection.

"Hospital Social Service" was the subject of a paper delivered by Mrs. Martha J. Megee, social service consultant, Pennsylvania Department of Welfare. Mrs. Megee developed the history and reasons for and various stages in hospital social service work and urged hospitals to develop this department, feeling that the hospital's work is not complete unless the case is followed until the patient becomes a producer.

In connection with the meeting was a large exposition of hospital equipment and supplies.

The following officers were elected: president, Mr. Howard E. Bishop, superintendent, Robert Packer Hospital, Sayre; first vice-president, Dr. Henry K. Mohler, medical director, Jefferson Hospital, Philadelphia; second vice-president, Sister Mary Rose, Mercy Hospital, Pittsburgh; treasurer, Mr. Elmer E. Matthewa, superintendent, Wilkes-Barre General Hospital, Wilkes-Barre; trustee, Dr. E. E. Shifferstine, superintendent, State Hospital, Coaldale; executive secretary, Mr. John M. Smith, director, Hahnemann Hospital, Philadelphia.

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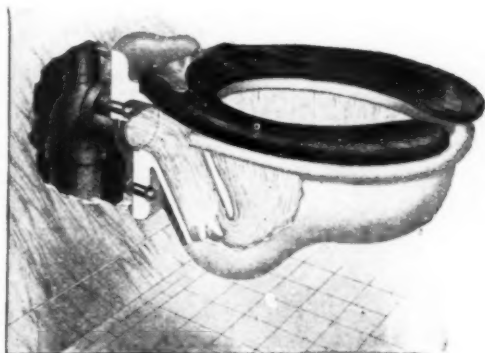
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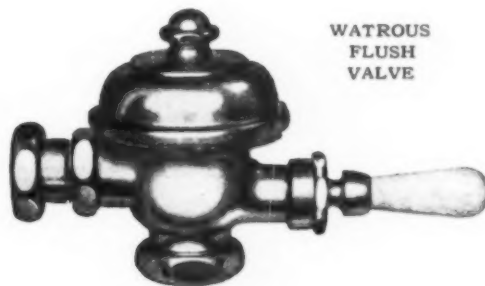
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THE ECONOMIC RELATION OF THE COMMON TEASPOON TO THE HOSPITAL

By EDWARD SWALLOW, FORMERLY PHARMACIST TO OUT-PATIENT DEPARTMENT, BELLEVUE HOSPITAL, NEW YORK, N. Y.

THIS article is written for the benefit of hospital superintendents and all executives responsible for the spending of money on drugs and medicinal supplies issued by dispensaries and out-patient departments of hospitals. It is hoped, also, that it will receive the thoughtful consideration of the attending and resident physicians in these institutions.

Sometimes a little thing, that is considered of small importance in the general scheme of certain activities, assumes serious significance when studied as a factor from the economical and efficiency standpoint. The writer, from his long association with hospital work, naturally knows something of the practical business end of healing institutions, and also of the side that chiefly interests the physician and patient. The latter, as all hospital workers know, is in the final analysis the more important. Therefore anything that affects the patient affects all concerned in the service and conduct of establishments created for the treatment of the sick.

Overdose May Be Dangerous

The common household teaspoon, an article much used by patients for the purpose of taking medicine, has not received the intelligent consideration due to it in view of the importance of hospital economy and the danger which may result from overdoses being taken by patients.

According to a study made by the Council on Medical Education and Hospitals of the American Medical Association, there are over 4,000 dispensaries in this country, 935 of which handle about 3,750,000 patients yearly. These patients make approximately 12,000,000 visits to these institutions. In regard to the number of patients cared for, the state of New York leads with 1,193,277, followed by Pennsylvania with 537,438. There are many dispensaries and out-patient departments of hospitals in the large cities that have a daily attendance of several hundreds of patients.

In this article we shall consider what happens daily throughout the year in a dispensary which has an average attendance of 200 patients at its medical clinics. It may safely be asserted that fifty at least of these patients use common household teaspoons when taking the liquid medicines prescribed for them by clinic physicians.

Now, there is a considerable difference between the standard teaspoonful of 60 minims which the doctor in-

tends should be taken, and the teaspoonful contained by the majority of so-called teaspoons usually found in the home. These latter articles have been found upon investigation to have a capacity ranging from one and a quarter standard teaspoonfuls, representing 75 minims, to one and a half standard teaspoonfuls, representing 90 minims, instead of the 60 minims that the physician orders for each dose.

Household Teaspoon is Wasteful

For the purpose of illustration, let us consider what happens when these fifty patients use household teaspoons when taking medicine. The ordinary four ounce bottle contains thirty-two standard teaspoonfuls, and when the medicine to be taken is one teaspoonful three times a day a bottle should last the patient at least ten days. Now, when the patient uses his household teaspoon, holding 90 minims, he gets only twenty doses out of the four ounce bottle, and instead of lasting him ten days the bottle lasts only seven. Hence return visits are more numerous than they should be.

At the moderate estimate of twenty-five cents for the cost of each bottle of liquid medicine issued by the institution, these fifty patients would cost in drug supplies, estimated by the two methods of administration, as follows:

	Cost per year
Using household teaspoon of 90 minims.....	\$694
Using standard teaspoon of 60 minims.....	456
	<hr/> \$238

This shows the remarkable difference of \$238 in cost of supplies to the institution when the patient uses the common teaspoon generally found in the home.

This constitutes not only a distinct loss to the institution but a real source of danger to the individual from the ever present liability of taking overdoses, thus nullifying the treatment prescribed by the doctor. When we consider the thousands of dispensaries and out-patient departments in this country that are affected in this manner the common teaspoon assumes some importance. Hundreds of thousands of dollars are needlessly wasted in this way every year, and several millions of persons run all kinds of risk by not using the standard teaspoon when administering medicine.

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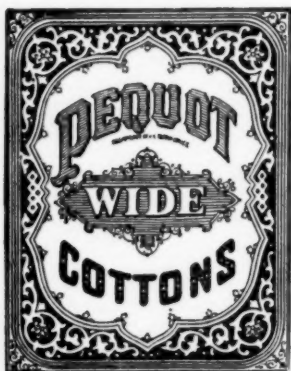
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Not only does this condition of affairs affect the drug supplies of these institutions, it also seriously curtails the time the attending physicians at these clinics can give to the examination of new patients. These fifty hypothetical patients are given in the first instance treatment for ten days. By using their household teaspoons they run out of medicine in seven days and have to return for more three days before their time, thereby taking up the doctor's time, and the time and attention of all concerned about the institution.

Consider this: Patients taking their medicines per standard teaspoon would return thirty-six times in one year; patients taking their medicines per household teaspoon would return fifty-two times in one year. It may be seen at a glance how much time is saved to the physicians, nurses, pharmacists, and all concerned with the institution if the patient takes his medicine in the manner directed by the doctor.

Teaspoon Should Be Issued with Medicine

The writer, from his experience in this matter, believes that every dispensary and out-patient department would find it economical in every way to issue standard teaspoon measures to all new patients when liquid medicines intended for internal use are prescribed, strict injunctions being given to use nothing else. In some institutions this could be done without charge, in others a covering charge could be made. When a dispensary physician prescribes for a patient a certain medicine in liquid form for internal use, he orders sufficient quantity to last the patient for a definite period, if taken according to his directions. Both the doctor and the institution have done their part to the best of their ability. But when the patient, by using common teaspoons, acts contrary to the advice given him in regard to the size of the dose to be taken each time, the efficiency of the institution and all concerned with it suffers.

COLOR: ITS PSYCHOLOGY AND PATHOLOGY*

IN THE realm of interior decoration and the treatment of homes, theaters, and churches much attention has been given to color although, up to date, little regard has been paid to the scientific use of color in the hospital or sick room, the one place where there is real need for its proper application.

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For the proper mental state of the patient, the first step toward inducing a salutary psychological condition is to divorce the hospital from all appearance of the old-time hospital structure. The glaring, cheerless dead white walls should be done away with, and in their place must be found colorful expanses which possess either stimulating or calming properties.

Not alone should the morale of the patient be considered, but the vitality and nerve force of the surgeons, physi-

*Excerpt from a monograph on color psychology and pathology prepared for the Glidden Company, Cleveland, O.

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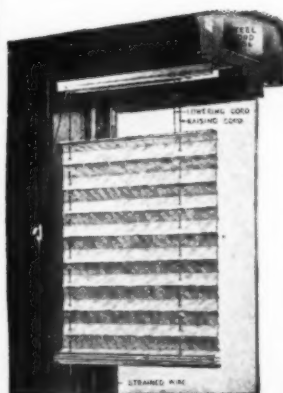
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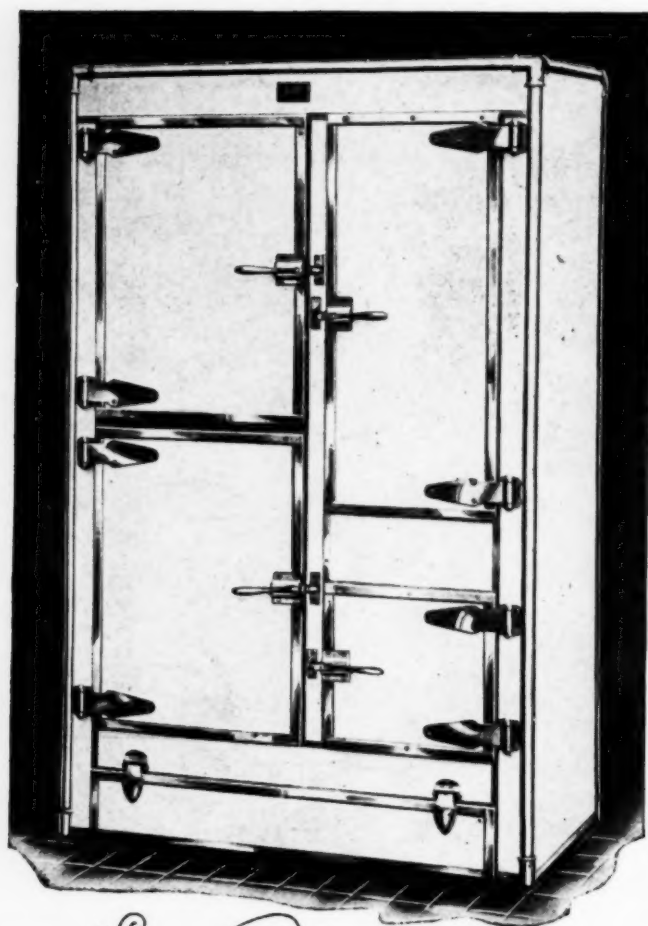
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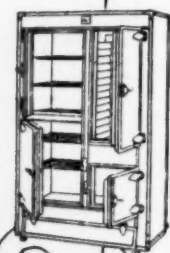
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cians, nurses, interns and all others who make up the hospital personnel, should be safeguarded by every possible means.

Eyestrain of Glaring White

It cannot be refuted that a great percentage of the fatigue which comes in the course of the day's work can be directly attributed to eyestrain. Glaring white, glossy spots which reflect undue amounts of light, all take their toll of energy.

There is a constant bombardment of the eyes by rays which are overstimulating. One who has experienced the fatigue which comes directly from undue stimulation of the optic nerve when the person is exposed to the blinding light of snowy expanses or desert sand, knows the complete enervation which is a reflex from this strain.

The surgeon seeking a moment of optical relief during the course of an operation, glances up to have his eyes blinded and filled with after images from the white glare of the walls. The white rays exert a pernicious and pathogenic effect which is cumulative, resulting eventually in serious nerve or ocular affections.

Were the walls of the operating room properly tinted with a hue conducive to tranquility, the moment which the eye takes for rest would actually be productive of repose, and a diminished expenditure of nerve force would result. Naturally, proper account must be taken of the manner by which the light upon walls is distributed that it will be properly diffused and free from deep shadow.

In this example, we see the possibility of properly tinted walls functioning as preventives and acting as prophylactics against the toxins of fatigue and strain, but their greatest value lies in their therapeutic value in a diversity of pathological conditions.

Two Classes of Patients to Consider

In general, the patients fall into two general classes, those to whom a tranquil environment is indicated, and those who have need of a more stimulating atmosphere. Acting upon a knowledge of color reactions, we can definitely state that a patient in a nervous condition, either chronic or acute, should be placed in a room where the prevailing tones are yellow green, the sedative action of this color being indicated as certainly as are bromides or hypnotics.

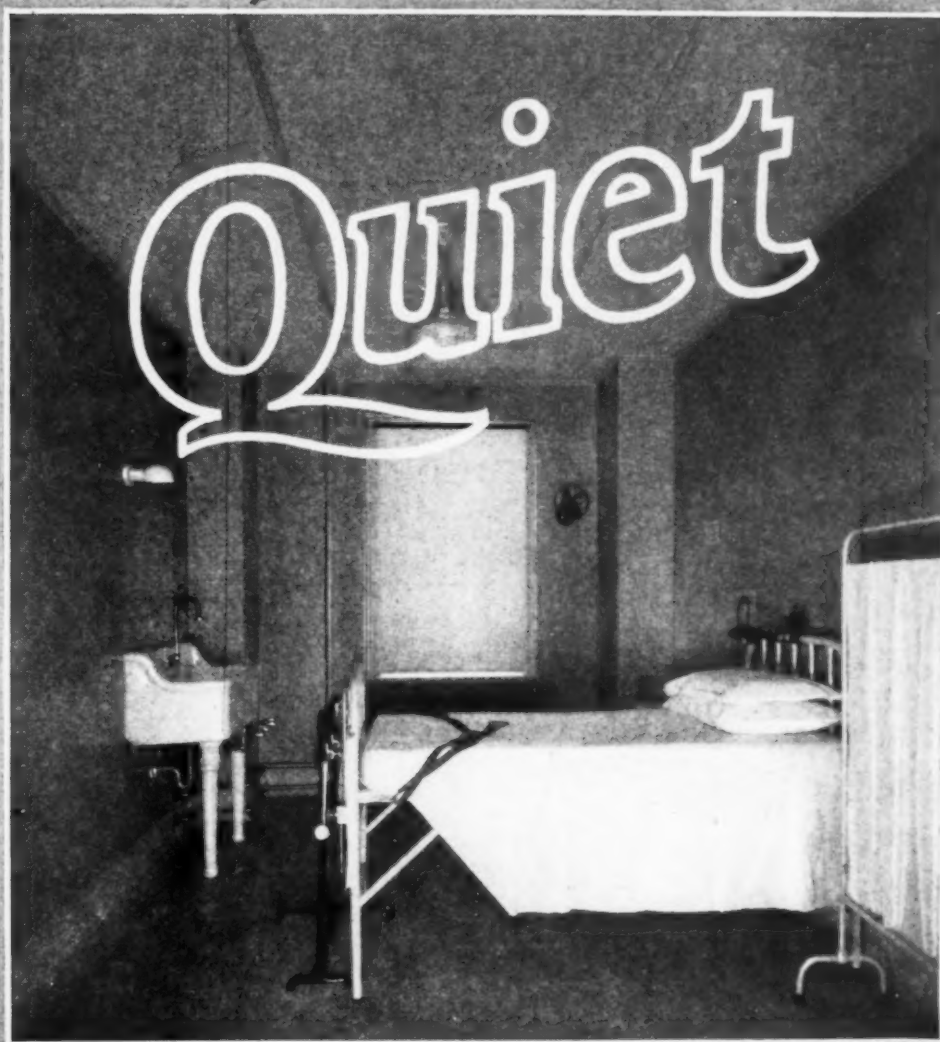
In the opposite case, where the patient is in a depressed state, mentally and physically, the predominating color of his surroundings should be a yellow of a proper hue.

We venture to predict, in view of the rapidity with which research in this field is bringing forth practical facts concerning the therapeutic value of color, that another decade will find a certain class of patients placed in rooms or cubicles of varying hues upon the dictation of a specialist in this particular type of color therapy.

The hospital must keep pace with the rapid progress made by medicine and surgery within the last few years following the war. The therapeutic value of color is something which now has been placed beyond question, and the matter for its proper application and further development now lies with the hospital itself, for it has outgrown the stage of being a matter for mere laboratory experiment.

Anything which will aid in placing the patient in the proper psychological state for recovery cannot be overlooked. Color, properly used, possesses this potentiality. To harness its powers will require the same experiment and research as obtained in the early days of electrical development.

Quiet



THE special value of acoustical correction in labor rooms is two-fold — it shields the patient against outside clamor, and at the same time localizes noises which originate within the room, thereby preventing the patient from dis-

turbing other occupants of the building.

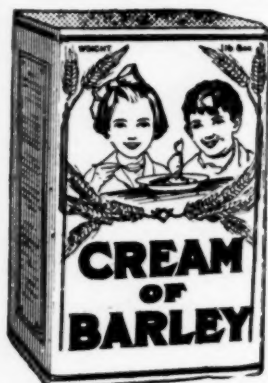
The photograph shows a labor room in the Jewish Hospital, Cincinnati, Ohio, with Johns-Manville Acoustical Treatment — one of hundreds of such installations throughout North America.

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TESTS OF COLOR PSYCHOLOGY

SUMMARY OF CHOICES REGISTERED FOR TINTS, SHADES AND PURE COLORS

	Choices by 115 males		Choices by 121 females		Choices by both	
	Total	Average	Total	Average	Total	Average
Tints	4906	42.7	5977	49.3	10883	46.0
Shades	5064	44.0	5378	44.5	10442	44.3
Pure colors	7399	64.2	6836	56.5	14235	60.4

TOTAL NUMBER OF REPLIES FROM 63 SUBJECTS INDICATING THREE GENERAL TYPES OF MOOD-REACTIONS DUE TO THE TWELVE DIFFERENT COLORS

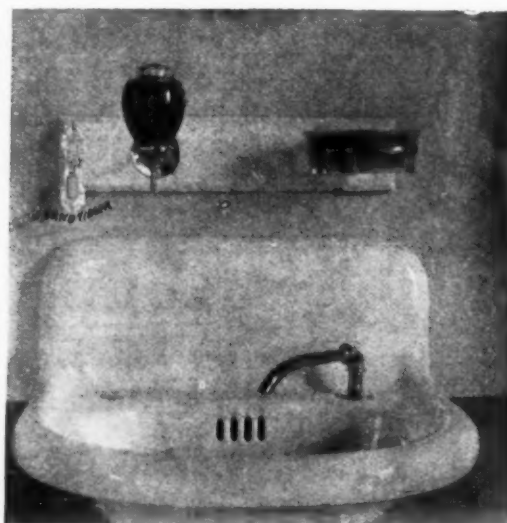
	Exciting influence	Tranquillizing influence	Subduing influence
Crimson	41	0	10
Scarlet	56	0	0
Deep orange	59	0	0
Orange-yellow	55	6	0
Yellow	53	6	0
Yellow-green	14	39	5
Green	28	32	0
Blue-green	32	23	6
Blue	11	21	30
Violet-blue	0	17	45
Violet	0	6	54
Purple	3	1	48

ATTENTION VALUE OF COLORS

Color	Men		Women		Average
	N	%	N	%	%
Black	151	33.5	43	12.2	22.9
Red	88	19.5	113	32.2	25.9
Orange	88	19.5	38	10.8	15.2
Yellow	4	0.8	23	6.5	3.7
Green	87	19.3	66	18.8	19.1
Blue	24	5.3	38	10.8	8.1
Purple	8	1.7	29	8.2	5.0

SAND GLASS FOR TIMING HAND SCRUBBING

The scrubbing of hands, in preparation for surgical operations or after they have been infected with secretions or discharges of patients suffering from contagious diseases, is of great importance. It is important that the hands should be washed in running water preferably by



employing liquid soap and hand scrub. One very necessary element in successful cleansing of the hands is that of time. The process should be long enough but not too long. If two persons are asked to scrub their hands for ten minutes without using a watch, one might scrub for five minutes and the other for fifteen minutes. Ability to estimate accurately time elapsed is possessed by very few persons. For some years, at the Providence City Hospital there has been in use an old-fashioned sand glass such as has been used in boiling eggs. The ones in use at the City hospital are two-minute sand glasses but you may purchase five or ten minute timers of the same type. The timer is hung on the hook, as illustrated, and when

The **DUAL THERMOSTAT**

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WIDE-spread attention has resulted from the first announcement of The DUAL THERMOSTAT: the most important invention and development of heat regulation since the introduction of the Pneumatic Thermostat by W. S. Johnson, founder of this company. It is the Gallagher invented Two-Pressure or Night and Day Thermostat developed and improved by Johnson Service Company: and combined with the Johnson Push Button Adjustment makes the complete and perfect system of heat regulation.

One Temperature for Day-Time One Temperature for Night-Time Simply Operated By Single Push Button

As an example of its utility: night school is held in the same building as day school: but only a portion of the rooms are used. Heat should not be wasted on the other rooms during the night. If the building is equipped with DUAL THERMOSTATS the engineer in his office or the principal in his office can shut off the heat in the rooms not used or regulate them automatically at a low temperature: thus saving fuel—by merely pushing a button at the close of the day's session. In the morning again by pushing the same button all

rooms can be restored to their day-time condition of being heated evenly, and automatically regulated at the desired temperature. What can be done in school buildings can also be done in other buildings where only some of the rooms used during the day-time are used at night. The possibilities of the DUAL THERMOSTAT are innumerable. The results are far-reaching. Its many uses suggest themselves to the architect and engineer. The additional charge over the ordinary system is very small, and the saving greatly exceeds this additional charge.

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This Month

Rubber Gloves

"Universal" surgeons' gloves are made from the best quality, pure para rubber. The special process of manufacture eliminates all foreign matter and produces a glove of superior quality, insuring smooth, tough, flexible, long-grained material.

The "Universal" has won the preference of surgeons because it is anatomically correct in every detail. The long, close-fitting wrists give added protection, and the full length, tapering, form-fitting fingers intensify the sensitiveness of touch, and follow all the natural contours, especially between the index finger and thumb without puckering or binding.

Thus, the snug fit enables the surgeon to work swiftly and accurately as though unhampered by gloves.

The "Universal" surgeon's glove proves its high quality, superior workmanship, and natural anatomical correctness by holding its shape and form when laid flat on a table. Try this test.

The "Universal" withstands a surprising number of sterilizations without injury. It is positively guaranteed to give more glove satisfaction and longer wear than any glove made. This is the measure of economy offered in all "Universal" products.

Write for our Complete Catalog of Guaranteed Hospital Supplies and Equipment.

Next Month
Silver Table Service

Universal
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the person, after handling a patient, goes to the bowl to wash his hands he first turns the sand glass, thereby hanging it by the other end, and proceeds to scrub until the sand has passed through. It is a very useful scheme for making sure that the nurse scrubs long enough and no longer than necessary. It can well be applied in operating rooms for timing scrubbing in preparation for operations.

A NEW ELECTRICAL HOT PACK

In cases where a hot pack is needed many hospitals now use a new type of electrical blanket which furnishes a steady uniform heat. The blanket is sixty-six by seventy-eight inches in dimension and has 15,000 feet of refined copper protected, magnet induction wire, woven on hand looms into the fabric. This in turn is covered with heavy duck, thereby making a durable appliance.

When attached to a 110 volt socket it generates a maxi-

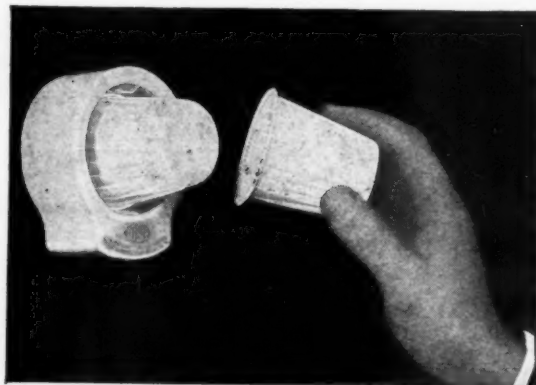


mum temperature of 100 degrees. No thermostat is necessary, as the length of wire and turns of resistance prevent overheating. A separate muslin slip is furnished with each blanket as well as a large size rubber sheet for water proofing the blanket.

The blanket is especially adapted for use in such cases as pneumonia, eclampsia, uremia, shock, and other post-operative conditions.

CUP DISPENSERS FOR PRIVATE WARDS

An ingenious device for dispensing sanitary paper cups in private wards has just been developed. It consists



of a porcelain container, which is attached to the wall. It holds a quantity of paper drinking cups, which can be removed easily, either by the attendant or by the patient.

The dispenser, which is in use in some of the leading hospitals throughout the country, provides a simple, inexpensive cup dispensing arrangement, which adds greatly to the convenience and service of a well-appointed hospital.